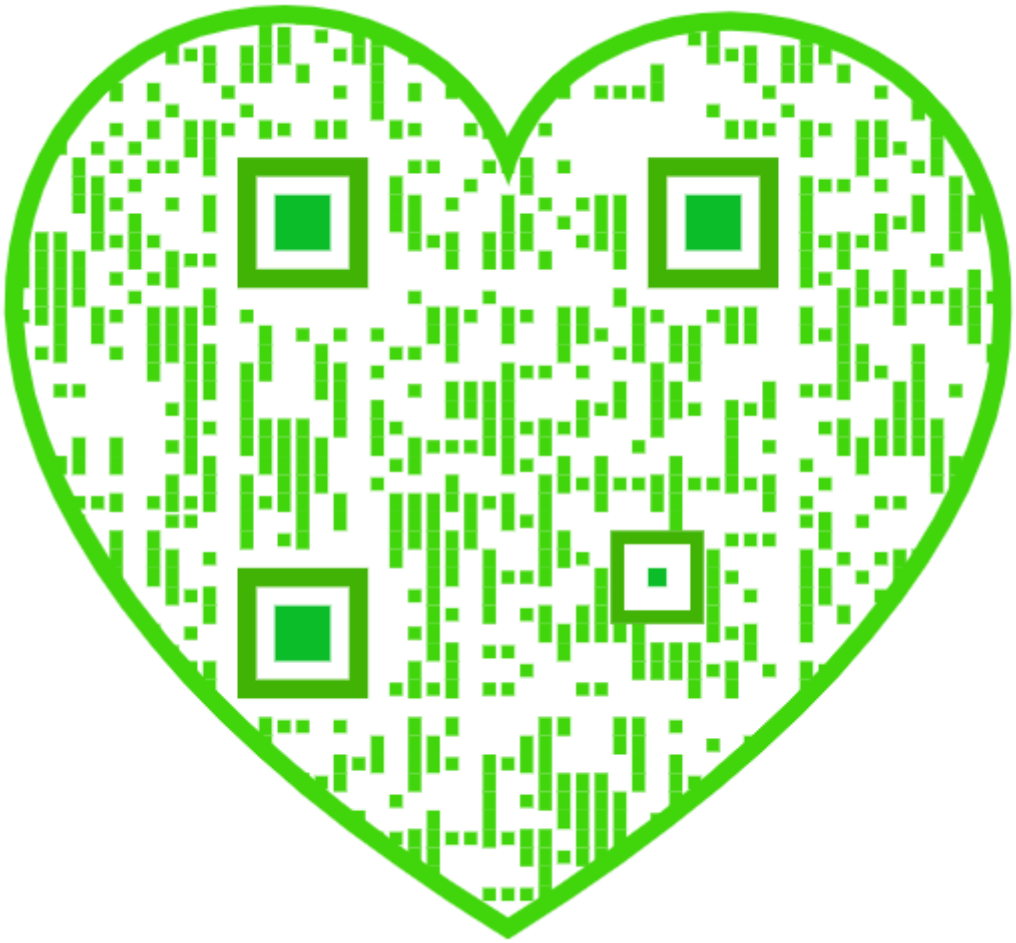

THE PACIFIC COAST ARCHITECT

A·MONTHLY·JOURNAL·FOR·THE ARCHITECTURAL · INTERESTS

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PORTLAND OREGON

VOLUME 5 APRIL, 1913 NUMBER 1

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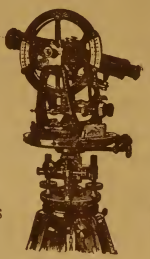

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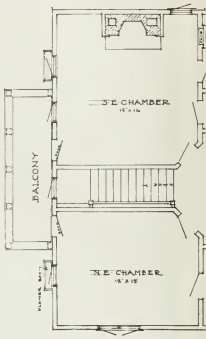
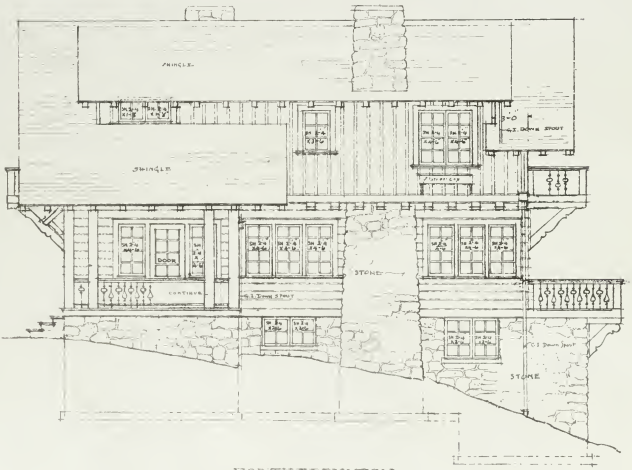
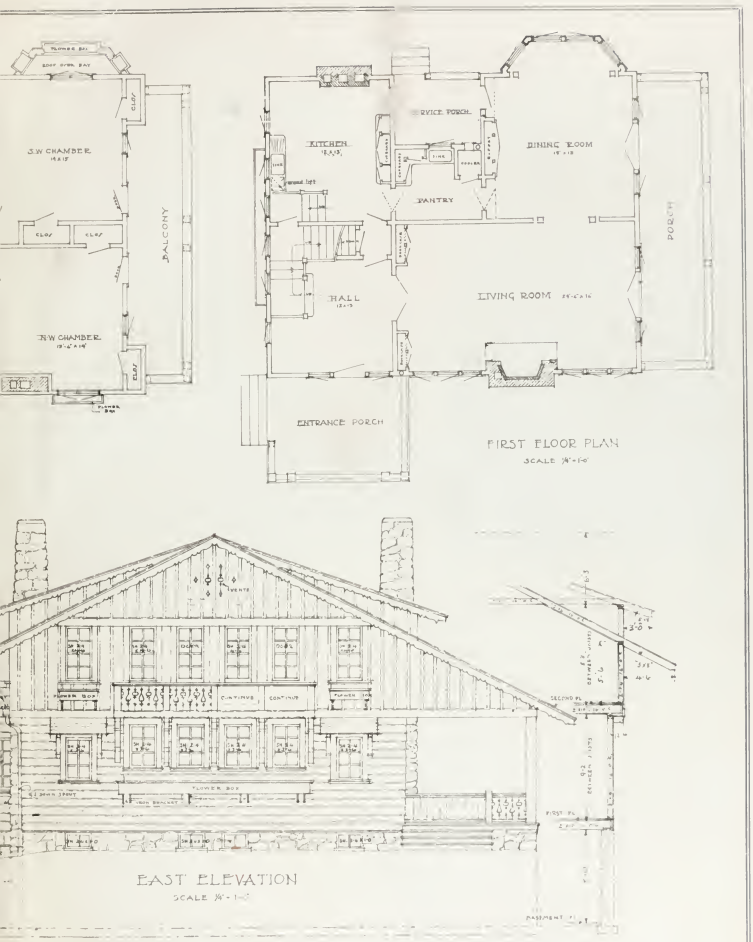




NORTH ELEVATION
SCALE 1/4"=1'0"

Floor Plans and
Residence, Mrs.
Johnson & Mayer, Archi



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The Pacific Coast Architect

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ADVERTISING RATES ON APPLICATION — TELEPHONE MARSHALL 236

Current Comment

Hope isn't knee-high to hustle.

* * *

It's a wise cork that knows its own pop.

* * *

If you would get up in the world, climb.

* * *

Never hit a man when he's got you down.

* * *

Not every man has the face to raise whiskers.

* * *

A man may look for work because of idle curiosity.

* * *

Push may get a man in, but he isn't always welcome.

* * *

Close friends are not the kind we want in time of need.

* * *

An ounce of done is worth more than a ton of going to do.

* * *

If you utilize the time wasted in waiting, it is not wasted.

* * *

A wise man may conceive an idea that any fool can throttle.

* * *

Flirt and the world flirts with you; marry and you sit at home.

* * *

The chap who keeps hammering away isn't necessarily a knocker.

* * *

To acquire a reputation for stinginess a man pays a high price.

* * *

The architect of his own fortunes is always planning extensions.

One way to raise the dust is to get busy with the carpet beater.

* * *

Should an original idea strike some men it would give them headache.

* * *

A lazy man's feet leave their imprint on the path of least resistance.

* * *

Success comes from good work oftener than it does from good luck.

* * *

You must sprint if you would catch good luck or outfoot the other kind.

* * *

People talk a good deal about their principles when they mean their prejudices.

* * *

The rolling stone gathers no moss—neither does it have to make an uphill fight.

* * *

When some people know their duty they manage to stave it off by asking advice.

* * *

No wonder that some children never amount to anything; just look at their parents.

* * *

The three degrees in medical treatment: positive, ill; comparative, pill; superlative, bill.

* * *

Though a man with money be a bad egg, people seldom take offense until he is broke.

* * *

While it is well to make things go as far as possible we cannot advise stretching the truth.

* * *

An additional reason why so many pins are lost is because they are pointed one way and bought another.

* * *

Don't be too economical. Many a man has tried to kill two birds with one stone, and both birds got away.

Washington State Chapter, A. I. A.

By Charles H. Alden, Secretary

The regular monthly March meeting of the Washington State Chapter was held after a dinner at the College Club, Seattle, Wednesday, March 5. The principal business of the meeting was a presentation of a report of the committee on professional charges and practice, which had been at work preparing a schedule of charges based on the recommendations of the American Institute of Architects, which had been previously adopted by the chapter; the committee's schedule going more into detail in defining special services, covered only in a general manner by the institute's recommendations. After considerable discussion, the schedule submitted by the committee, through its chairman, Mr. Cote, was ordered sent to each chapter member for careful consideration, with the expectation of some final action being taken on it at the next regular meeting.

Chas. H. Bebb, who has been connected with the state's architectural work, acting as advisor in the recent state capitol competition, gave an account of an interview with the Governor during which the question of the employment of a state architect, as proposed by Governor Lister, was discussed. This matter was referred by the chapter to the legislative committee.

By request of the members, the secretary, Chas. H. Alden, who had recently returned from San Francisco, after attending a meeting of the San Francisco chapter, gave a brief account of the meeting, the work of the Southern organization in general, and that of the civic center commission of San Francisco. Several photographs and drawings were exhibited, illustrating the present development of the civic center project and of the Panama-Pacific Exposition group.

* * *

Minor Points for a City Beautiful

In continuing the plans for a City Beautiful, there are certain minor matters which should never be lost sight of, because they are highly important. A few may here be enumerated. In the Spring the property owner should see to it that his premises are cleaned up. Old tin cans and other accumulations of the Winter should be removed, not only for sanitary reasons but for the sake of appearances. Weeds should be pulled up, lawns neatly trimmed and the earth in the flower beds spaded and raked. A coat or two of fresh paint adds wonderfully to the looks of things and helps to preserve buildings. To accomplish the proper effect, such work about one's premises should be constant and continuous, rather than spasmodic. Finally one's pride in the looks of things becomes a matter of habit and adds real value to property. Then, again, take a city like Portland, for example, with a population of upwards of 300,000 people, many of whom own their homes. Suppose each one kept up their property along the lines suggested, imagine what a tremendous impression for good it would make upon the minds of newcomers, all of which would redound to the benefit of the city.

* * *

Besides, if there is any truth in the adage that all men are born free and equal, how is it that one artist gets his picture hung in the salon and another gets his in the rogue's gallery?

Convention and Exhibition of the Architectural League of the Pacific Coast and the Portland Architectural Club

The local architects are giving a great deal of time and attention to the plans under way for the success of the third convention of the Architectural League of the Pacific Coast, which is to be held in Portland June 9, 10 and 11.

During the convention held in Los Angeles last year the following officers were elected: president, Ellis F. Lawrence, Portland; vice-president, John Bakewell, San Francisco; Secretary, M. H. Whitehouse, Portland; treasurer, Myron Hunt, Los Angeles.

Great plans are being made also for the entertainment of the different delegations from the Coast cities.

From June 2 to 21 inclusive, the Portland Architectural Club will hold its fifth exhibition jointly with the League, which is a customary thing wherever the League convention is held. For this purpose, the Lipman & Wolfe Company have kindly offered the use of their eighth floor and have assured us that they will do everything in their power to aid us in making it a "thing of beauty and a joy forever." It will be the earnest endeavor of all concerned in this great undertaking to present for inspection the most complete collection of architectural and decorative work ever seen in the West.

All correspondence relative to the exhibit should be addressed to the Exhibition Commitee, 247 1-2 Stark street.

The members of the exhibition committee are A. E. DOYLE, Chairman, EDGAR M. LAZARUS, A. F. MENKE, F. WEBER, FRANK LOGAN, MARTIN SCHACHT, DAVID C. LEWIS, M'DONALD MAYER, JOSEPH JACOBBERGER, D. L. WILLIAMS, JOHN WILSON, H. A. WHITNEY, ELLIS F. LAWRENCE, LEWIS E. MACOMBER, W. G. HOLFORD, FOLGER JOHNSON, M. H. WHITEHOUSE, H. GOODWIN BECKWITH, Manager and Treasurer.

* * *

Architects Favor House Bill No. 372

The manifestly unjust methods for selecting architects for public buildings hitherto prevailing, led to the introduction before the recent session of the Oregon Legislature of house bill No. 372. It was presented at the instance of the Oregon Chapter of the A. I. A. Reviewing the purposes of the bill, Architect D. L. Williams, of Portland, is thus quoted:

"Architects invest thousands of dollars in competitions for public buildings out of which they get nothing. We want a plan by which the architect will know the exact terms of the contract, by which every contestant will be given even breaks on information, given out, which provides that the contract must be awarded to the winning architect and which provides that all drawings not used, be returned.

"Other provisions of the bill are that the programme for competition must be prepared by competent professional advisers, that public notice of the competition be given, that the name of the architect who has custody of the drawings be made known to the competitors, that the designs be limited to one and that highly colored perspectives be not accepted or allowed."

OUTLINE OF PLAN TO LIMIT HEIGHT OF BUILDINGS

By D. KNICKERBACKER BOYD.
(In The Philadelphia Public Ledger.)

A number of tall buildings have recently been erected in Philadelphia, several others are now under construction and still others are being projected. Are we to allow this tendency to continue or shall we resolutely face the problem of height restriction, and determine that the time has arrived when we must call a halt on our perpendicular expansion and confine ourselves to a normal lateral growth?

Such high buildings as we have had until recently have been comparatively few. Those just completed and now under way add materially to the number.

* * * * * *

In the face of these conditions and in view of the erection of a projected 15-story apartment house on the south side of Rittenhouse Square, heretofore given up exclusively to abodes of moderate height, it is not a matter of surprise that a bill to regulate the height of buildings is being prepared for submission to the state Legislature.

The purpose of this article is not to make a plea for the entire abolition of the skyscrapers, but merely for their restriction to such an extent that in locating these tall buildings a perfect economic balance shall be obtained. And when all other considerations have been taken into account the skyline will also have been improved. Instead of the impression now created of the uplifted arms of a crushed and stifled conglomeration of buildings appealing to the heavens for more light and air, we should return to the once simple dignity of the occasional spire or tower arresting the eye of the spectator and pointing his thoughts upward.

It has recently been said that the height of the architectural giraffe is limited only by the capacity of the elevator equipment and the pressure on the earth, but it seems to me that the limit will have been reached long before that, when the pressure upon the public patience has reached the crushing point.

* * * * * *

In the movement to correct the evils of the skyscraper much has been said about shutting off the light of the heavens and circumscribing the air of the streets. This "canyonizing" of the streets is rapidly being accomplished, and its baleful results are beginning to assert themselves. It is known that existing drains and sewers are becoming totally inadequate to care for the additional duties imposed upon them in certain sections by the concentration of humanity in tall buildings. Even the possibility of the disasters that may result from the human congestion of some of the streets—in the case, for instance, of an earthquake tremor, an unusual explosion or the complete suspension of either surface or subway traffic—has been pointed out, but without any suggestion of that adequate remedy—the relieving of the streets themselves.

Our modern civic surgeons have made incisions and provided, through subways, additional interior means of circulation, and these same engineers have bodily made diagonal surface or skin-deep cuts through congested districts, but in spite of these our cities are suffering from anemia. They must be given a freer circulation by widening the streets, and the streets must be given more air and sunlight by keeping down the heights of buildings.

Suggestions have been made for restricting the height and area of buildings, as, for instance, the offsetting or "stepping" of the facades with each increase in height. Such a scheme, while undoubtedly admitting more light and air to the streets below, does not, however, offer any relief to the congestion of the streets, nor does it effectually place a limit on the building height.

The same objection, but in a less degree, would apply to the proposition that, above an established limit of height, a portion of any building may go up in the form of a tower. An absolute limit of height, as has recently been adopted by some of our larger American cities, may be the surest solution of the whole problem, but it is not an ideal one.

The ideal solution will regulate the height of all buildings in a zone or district to the limit best suited to that particular section, and will in turn limit, within such a district itself, the height of each building in proportion to the width of the street or other open space upon which it faces, as was first done in Washington, Boston and most of the European cities.

Needless to say there would be no lack of light and air around the highest building in the world if it could be erected by itself, or if not planted in too close proximity to another like it; if permanent open spaces surround any one of them there can be no objection to any reasonable height.

Since it seems that we must have some high buildings, we must control them. Since we should have wider streets, let us, therefore, make the height of the buildings and the width of the streets interdependent, proportioning one to the other in such a manner that as the high buildings go up on the opposite sides of the street they must be made to keep further apart than the low ones.

In order to accomplish this two-fold result, it is my proposition that the owner of any piece of ground who desires to erect thereon a high building shall be compelled to dedicate to the city a portion of that property facing the street, for which, of course, the city would have to pay. This means that it is but taken over and paid for by the people who will have to use the street, and who will also occupy the building. Any owner who contemplates erecting on any given street a building which by its very size and nature will attract more people and more business to that particular portion of the street than it can reasonably be expected to accommodate, should be made to furnish a somewhat adequate amount of space, or rendezvous, in front of it. This rule now obtains in several of our large cities.

I would, therefore, limit the initial height—that is to say, the maximum height at the present regularly established building line—to one and one-quarter times the width of the street or open space upon which the building faces. This would give on a street 50 feet wide a 62 1-2-foot high building (if erected at the usual building line), which would be equivalent to a six-story building used for residential or office purposes or a five-story light manufacturing establishment.

Any building taller than this initial height should be so set back that the cornice or top of its perpendicular face shall not extend above an imaginary line, which might be called the "building and height line."

Now if this imaginary diagonal be drawn from the curb of any of these streets, assuming the sidewalk to be one-quarter the width of the street, to the top of any building which is the limit of height, above mentioned, at

the normal building line and continued into space, it becomes the line of restriction to which I have referred. It is thus apparent that to go up one must go back. This scheme, therefore, forces the entire perpendicular face of the building back from curb in a fixed proportion to each additional story the building may go up, which can be roughly figured upon as a two-foot increase in the width of the sidewalk for each ten-foot story above the initial height. Thus it also reduces the area of every building in proportion to every story in height, and, while it does not absolutely prohibit high buildings, the loss of space entailed by this ever increasing reduction (on a street of average width) will most effectually discourage their erection. To put it in another way, the owner would have to give about two feet of sidewalk to the city for every extra story of its sky he occupied.

As each low building gives way to a higher one, some in five years from now, some in ten, some in thirty, the higher buildings will go back to take their places among their neighbors on the new line of progress, and *ipso facto*, we shall have the wider streets where wider streets are needed.

It is obvious also that this process of evolution could be taking place in different parts of the same street at the same time. Thus the least used part of the street under prvailing local conditions might remain comparatively narrow, while another portion would become built up and wider automatically.

This is only beginning today to care for the future. And if, for instance, the possibly irregular cornice line or uneven frontage line be deemed objectionable from an esthetic or administrative standpoint, it need be borne with by one generation only as a concession to the requirements of the next.

We have had an illustration of this right here in Philadelphia, where the widening process has been going on in Chestnut, Walnut and Arch streets, under compulsion of city ordinances for many years past.

While this is being agitated here and a committee is just being created to consider the feasibility of making similar recommendations in New York, the meeting of the Philadelphia Chapter of the American Institute of Architects tomorrow night, at which the subject for discussion is to be "The Regulation of Building Heights," will be a most timely one. R. Clipston Sturgis, vice-president of the American Institute of Architects and president of the Boston Society of Architects, will be the principal speaker, and many prominent persons, including officials of this city and others, have been asked to take part in the discussion which will follow.

Heights of Buildings in Other Cities

In the past few years many of our cities have adopted limits of height for buildings. These cities and their limits are:

Baltimore.—Fireproof buildings limited to 175 feet, and non-fireproof buildings to 85 feet.

Scranton, Pa.—All buildings limited to 125 feet.

Boston.—Two and a half times the width of the street; maximum 125 feet.

Buffalo, N. Y.—No greater height than four times the average of least horizontal dimensions of the building.

Chicago.—Until September, 1911, maximum 260 feet; then absolute limit of 200 feet.

West Chicago.—The height at the street line shall not exceed two and a half times the width of the widest street which the building faces, but any portion of the building setting back from the street may be increased in height up to two and a half times the distance from the face of such offset to the property line at the opposite side of the nearest street.

Cleveland.—Two and a half times the width of the street, with maximum of 200 feet. Recesses or set-backs to be counted as added to width of street.

Indianapolis.—No regulations as to height of fireproof buildings, except on Monument Place, which is regulated by state law, where no building shall be over 86 feet.

Jersey City.—No building or structure except a church spire, shall exceed in height two and one-half times the width of the widest street upon which it stands.

Los Angeles.—Limit of 150 feet is fixed by city charter. This applies to Class A steel frame buildings. City ordinance fixes the limit of height at 133 feet for reinforced concrete Class A structures.

Paterson, N. J.—Warehouses and stores must not exceed 100 feet in height.

Denver.—Buildings not to exceed 12 stories. Those more than 125 feet to be fireproof.

Portland, Or.—Code of 1911: "No building or other structure hereafter erected, except church spire, shot tower, water tower or smokestack, shall be of a height exceeding 160 feet."

Newark, N. J.—No building shall exceed 200 feet, but if to be used as warehouses or stores for storage or sale of merchandise, shall not exceed 150 feet.

St. Louis.—On streets less than 60 feet, two and a half times the width—maximum 150 feet—except hotels, which are limited arbitrarily to 206 feet. Office buildings may be erected to a height of 250 feet under special conditions.

St. Paul, Minn.—Not more than 20 stories; 250 feet maximum limit.

Tacoma, Wash.—Class A buildings shall not exceed 12 stories or 152 feet if all interior as well as exterior is of fireproof construction, same can be 10 stories, or 200 feet.

Washington, D. C.—In the main the limit is the width of the street plus 20 feet; maximum 130 feet on business streets (160 feet on north side of Pennsylvania avenue), and 85 feet on residence street.

Providence, R. I.—Has height limitation ordinance before council, representing the persistent effort of the local chapter. A. I. A., and Cincinnati, O., is proposing to present ordinance of limitation.

Sea-Shell Windows of the Philippines

Sea shells are used as generally for window panes in the Philippines, and particularly in Manila, as is glass in this country, and the effect of tropical sunlight filtering through the silvery grayness of the shells, softened and gentle, is magnificent. The windows in the main entrance of the Philippine General Hospital, Manila, are probably as fine a modern example of the use of the sea shells as can be obtained. The sea-shell windows may also be seen at their best in the old churches.

Manila alone uses in the neighborhood of 5,000,000 Kapas shells each year for windows. The largest-sized shells will square about three inches. These sell for from $1 to $5 per thousand, according to quality. Shells that will form panes of about two square inches sell for anywhere from $1.50 to $3 per thousand, and are used for ordinary purposes, in dwellings, stores and the like. Tests prove the shell panes to be much stronger than glass.

Where America Lags Architecturally

Edmond Hermann, one of the leading architects of the United States, recently delivered a lecture before the Builders' Exchange of Canton, Ohio, in which he showed where American cities lag architecturally behind those of Europe. He made comparisons that were, on the whole, unfavorable to us, due to the varying construction methods and customs of America and Europe. He said:

"The two main periods through which buildings have to go to a successful end are: first, their 'planning and designing,' and, second, their 'construction and erection.' These two distinct divisions are the same all over the world, but the carrying out of their meaning and purpose is so different from each other in this country and Europe that it pays well to compare them.

"Our first operation, the 'planning and designing,' is done by the owner with the assistance of a professional adviser. The owner describes in general to his adviser a more or less rough image of the future structure and leaves it to him to work out plans and specifications, according to which the 'construction and erection' cannot be done well without having the 'planning and designing' brought to a successful end it is of the utmost importance that the owner solicit a skilful adviser.

"This adviser, which we might call architect, or builder, is supposed to understand, not only the construction of buildings, but ought to be conversant with the laws of states, have knowledge of all the material used in every building to the minutest detail, have a true understanding of the different arts and crafts, and last but not least, he must be trained to harmonize beauty with utility.

"All this knowledge is absolutely necessary to the adviser to give the owner the proper service. Why is it then, that when the adviser is equipped with all the aforementioned knowledge that we do not get the correct results?

"The architects of other nations have to go through a severe training to call themselves architects. If anyone else would undertake to call himself an architect without having the required knowledge he would be liable to prosecution. In our country an architect is in many cases an amateur that has nerve enough to stand up before the people and take advantage of their ignorance and give them services for just a nominal fee that leads the owner into all kinds of trouble, with the final result that the construction of a building is only a makeshift of what it really ought to be.

"The two great institutes of American architects, recognizing these facts, are endeavoring to secure laws which will require every architect to have a license, just the same as licenses are required for doctors, druggists, etc. This only will do away with dilettantism.

"Under 'planning and building' we furthermore have to consider the laws which are made to have the buildings constructed according to certain rules and regulations. These rules embody our experience which we have gained by former accidents and which are preventive measures.

"Our second operation, 'the construction and erection,' is just the same as transferring theory into practice. The plans are turned over to the building contractor with the intention to have him carry out the ideas as laid down on paper. In very few cities of our country plans must be submitted to some building department for approval.

"In smaller cities there are no authorities to look after this matter, and the submittance for approval, as we, for instance, have in our city, is nothing more than a joke. In Germany, every plan, whether it is a new building, or a small addition to any dwelling house, or even a stable, must be submitted for approval to the authorities. In every county a learned architect is standing at the head of a department. This architect is called district inspector.

"The materials used in the construction of buildings in Germany are the same materials which we use here. The main difference is that the work is done in a more substantial way, and that it is the endeavor of every owner and builder to build houses that last and will pay better interest in the long run, instead of trying to break records every time a new structure is to be erected.

"In large cities the height of buildings is limited in proportion to the width of the street, and so it is that long streets show you all the buildings of the same height, which we call sky-line. This sky-line would be monotonous to look at, but the roofs are constructed under all kinds of angles and are ornamented with dormers, towers, etc., and so relieve the monotony of this sky-line. The main cornice of every house, when it is constructed of wood, must be protected with metal about five feet away from the adjoining building on either side to prevent the spreading of fire over to the neighbor's cornice. Every roof must be provided with plank gangs for inspection of the chimneys, which are regularly cleaned by licensed chimney sweepers, as all the ovens, stoves, kitchen ranges, etc., are heated by coal or wood, which necessitates a cleaning out of the chimney flues to avoid clogging up."

In every leading country in Europe the same street regulations are enforced in all building construction. My experience and observation abroad convinces me that we in this country are a long way behind Europe in the matter of regulating and enforcing our regulations in all building construction.

* * *

Kind Words for Craftsmen

In an address just given by Dudley McGrath, a well-known architect of Brooklyn, before the Architectural Department of Pratt Institute, Brooklyn, N. Y., being one of a series of lectures arranged by the Brooklyn Chapter, A. I. A., on subjects pertinent to architecture and building, he added this to his practical remarks concerning superintendence:

"In performing your work, whenever it is possible to do so, compliment the workman or contractor upon the work being done. We all like to hear nice things said about ourselves and one who only finds fault and never anything to commend is much disliked. You will find that by kind words, when it is possible to give them, you will, in the long run, obtain much the better results."

* * *

An Odd Building

Two stories high, 24 feet long and six feet wide, of steel construction, the premises to be erected at 2-4-6 Pender street west as stores and rooms for Sam Kee, will, when completed, form one of the most peculiar buildings in the whole Dominion. When Pender street was widened a slice was cut off the north side of the buildings. The latter were then shored up with props. So narrow is the building that the architect, Mr. Kennedy Bryan, has found it necessary, in order to make a turn in the stairway, to come six inches outside the building at the upper story. The estimated cost is $8000, and only steel construction was regarded as sufficiently strong for the purpose.

The Profession of Architecture

Professor Reginald Bloomfield, president of the Royal Institute of British Architects, in a recent address had some interesting things to say on the subject of the position of the architect as a professional man.

"This subject," he declared, "has given ground for a good deal of anxious consideration in the last year or two.

"Adverse verdicts have been given in the courts which appear to saddle us with unfair and impossible responsibilities, and there can be no doubt that the position of a practicing architect today is more difficult than it was forty years ago. He is expected to know a great deal more, and to do a great deal more for his money, than was expected of his predecessors in the halcyon days of the seventies.

"Applied science has developed so fast and in so many directions that it is impossible for an architect to keep pace with every branch of it; and, beside all this, he has his own art to master. For, when all is said and done, the first business of an architect—that which differentiates him from other men—is his power and knowledge of design; and that, in the chaos of modern styles and the kaleidoscope of fashion, is not less, but more, difficult to acquire now than it was 150 years ago, when everybody worked in one manner as a matter of course, and every builder knew the Orders.

"And it is more difficult than it was fifty or sixty years ago, when hygiene was a negligible quantity, electricity as a commercial power unknown, and the builder was a man who really knew something of the practice of building. At the same time, I think there has been an unnecessary scare in this matter. We architects have, and always have had, our responsibilities to our clients, and, provided an architect knows his business, watches his work, and takes due care of his client's interests, I do not think his position is one of greater danger than that of other professional men.

"The pressure of competition is keener than it used to be, and the standard of attainment is higher; but this is due, in the one case, to causes beyond our control, in the other to our own efforts; and what we have to do is, on our part, to qualify ourselves for our responsibilities, and to stimulate in the public a more intelligent appreciation of the services than an architect can and ought to render.

"If the public understood that an architect is an individual with the necessary limits of an individual, and not merely a wholesale entrepreneur on the one hand, or a building policeman on the other, there would be less of the regretable misunderstandings that sometimes occur in the practice of architecture; but architects should not forget that the only effective passport to the appreciation of the public is the merit of their own personal work, and that if the profession of architecture is to receive a higher recognition in the state than it obtains at present, it can only do so by insuring a high standard of education and attainment among its individual members."

* * *

Building Up Trade

If you've got a specialty that will commend itself to builders, make a contract for space and start right in and talk about that specialty. Dwell on its good points, point out its advantages over similar devices, set forth its dominant qualities. And keep right on, week after week talking about it. If you don't book orders we'll bet you a big red pippin that there is either something better on the market or your specialty isn't worth a kopeck no way.

The Old Gives Way to the New

The building activity in the business section of Portland is particularly noticeable. For several years it has been steadily gaining, and is now more vigorous than ever. Old, ramshackle buildings, good enough in their day and generation for all practical purposes, do not answer, in this modern age. Ground values have increased, and aside from the fact of their out-of-date appearance, rentals no longer represent a proper percentage return on the investment. The laws of necessity and demand required that they should give way to structures demanded in this age. This has sealed the doom of many old-time structures, and their owners have generally become cognizant of the march of events and have torn them away. The process of elimination still continues and will do so until there will not remain a single one of the old landmarks of the past.

But this weeding out process has been greatly accelerated by the action of the City Building Inspector's Department. Acting under the authority of the Building Code, Building Inspector Plummer and his corps of assistants have made rigid inspections of about 200 modern buildings in the fire limits recently. They have discovered that fully one-half have deteriorated to an extent of more than 40 per cent, bringing about condemnation. "Improvements" that could not pass the official inspection and which were not those prescribed by law, have brought about the doom of these ancient structures. These will be razed within a reasonable time, and on their sites will appear modern structures.

* * *

To Limit Height of Buildings

The Portland Building Code Revision Committee has decided that hereafter only absolutely fire-proof buildings of most modern construction, without woodwork, that used for handrails only excepted, can be erected in this city to a height of 15 stories, or 200 feet. The limit of 12 stories, or 160 feet, is placed on steel-frame, fire-proof buildings, carrying wooden doors and window casings. Reinforced concrete buildings may reach 10 stories, or 140 feet.

Those recommendations for amendment to the Building Code were laid recently before the City Council. The committee comprises men who are representative of every element in Portland allied to building interests, appointed by Mayor Rushlight.

The opinion of Robert H. Strong, manager of the Corbett estate, said an unrestricted high building craze would result injuriously to the best interests of the city, should a campaign of competitive building get under way. It is the belief of Building Inspector Plummer that the restriction in height to 160 feet, or about two and one-half times the width of streets, is a reasonable one.

* * *

Getting To The Front

The many Portland friends of Louis Rosenberg, formerly of this city, now attending the Massachusetts School of Technology, Boston, are glad to learn that he is still forging ahead. Out of 112 competitors in the first preliminary for the Paris Prize, Mr. Rosenberg was placed fifth. April 5 he competed in the second preliminary, which was a 24-hour, en-loge sketch. There were 15 men selected from previous work in addition to the five chosen at this first preliminary. From the second preliminary five men will be picked for the final. The winner will be sent to Paris for two and one-half years. Mr. Rosenberg expects to visit Portland this Summer.

Extracts from the Proceedings of the Forty-sixth Annual Convention of the American Institute of Architects, Washington, D. C., December, 1912

THE PRESIDENT: I have the honor of presenting to you Mr. Franklin H. Wentworth, representing the National Fire Protection Association, who will give us a talk on the proper co-operation between the architects and the association which he represents.

(Proper Co-operation Between the Architects and the National Fire Protection Association, by Franklin H. Wentworth.)

I shall not consume many of the minutes of the available half hour in which I am privileged to talk to you by any specific quotations of statistics, but we cannot really approach this subject as it ought to be approached without knowing its proportions. I wish, therefore, to give you just one or two contrasts, to indicate the magnitude of the problem which we face.

The United States Government, Department of Commerce and Labor, in a recent report, says the average annual per capita fire loss in six European countries is thirty-three cents, while the average annual per capita fire loss in the United States is nearly three dollars.

Glasgow averages in fire loss $325,000 a year. Boston, smaller than Glasgow, averages two millions annually. Berlin's average fire loss is $175,000 annually. Chicago, of the same size as Berlin, averages five millions. Berlin's fire department costs her $300,000 a year. Chicago's fire department costs her three millions. These contrasts are sufficiently startling, and they are not typical merely of the cities which I have mentioned; they are typical of this entire country of ours.

What is it that influences us as a people—that precipitates or permits this tremendous contrast in national housekeeping—for that is all it is?

It is psychological with us. We have been born and bred in a country of unlimited resources and that has bred in us a certain profligacy regarding these resources. Only within the last two or three years has the United States Government given any attention whatever to the conservation of those natural resources still remaining to us.

When our forefathers settled the New England coast they had to cut down and burn beautiful standing pine in order to get at the land to till it. That bred in them, and has continued in us, a feeling that our supply of timber was unlimited—consequently we have never thought of conserving timber. Go out across the country, as I did last year, through Michigan, Wisconsin, Minnesota; you will see thousands and thousands of acres of stump land, land off of which the timber has been cut for forty or fifty years, with no thought whatever of reforestation. If you go on to the Northwest, Oregon and Washington, you will find they are doing the same thing; cutting off the timber; they can hardly be prevailed upon to protect it from the forest fires that ravage it almost annually.

Now, that is psychological and that is the reason we have given no attention to these enormous figures of the fire waste, because it has seemed easier to us to build, burn and build again than to adopt those methods of building long ago adopted by the more prudent countries of Europe.

Now, the approach to this problem as we made it nearly twenty years ago was an interesting approach because it showed what we still have to contend with in the minds of the people. Twenty years ago the fire waste in New England was disastrous. The fire waste in certain classes of property was so great that the insurance companies began to decline to insure them at any rate which might be offered. That precipitated an investigation. A little body of engineers got together to inquire into the cause of this disastrous fire waste. They got the statistics from a number of fire insurance companies and they found that most of these fires could be traced to some specific cause. It might be a little glue pot in a shoe factory; it might be the picker room of a cotton mill. There was some little fire using process in the course of manufacture to which sixty per cent of these disastrous fires, which usually consumed the whole factory, could be traced.

It occurred to these engineers that it was not a difficult thing to segregate this special hazard, whatever it might be; enclose it in a fire-proof room and equip that room with fire-extinguishing apparatus so that fire might be quenched at its inception.

Then they turned to floor area, which in many of these factories was much too great, acres of floor space full of combustible, inflammable materials, especially in a textile factory, so that when a fire occurred in any part of it, it would sweep over this great area and no fire department on earth could hope to cope with it. Therefore they erected across those factories fire walls at certain intervals, dividing them up into fire sections. Stairways were open from basement to roof, elevator walls were open, there were belt openings in the floor anywhere they wanted them; so when a fire occurred on any floor it would have the advantage of a draft to the roof. A wretched condition indeed.

The committee recommended that the elevator wells be stopped off; that the stairways be enclosed, and that the belts be run in towers, taking off the power through small apertures on each floor. The segregation of the special hazard that did the most mischief; dividing up floor areas; sealing up vertical openings so that fire would have to be fought only in the section in which it originated or on the floor on which it originated; are such simple ideas of engineering—such kindergarten ideas—that one stands amazed that they had not been put into operation long before.

But it was because it was psychological, because no one had assumed any responsibility for fire waste. It was assumed no one was interested in checking fire waste except insurance companies! So this tremendous fire waste grew and grew until insurance capital itself refused to bear the load, and that precipitated this investigation.

Immediately these simple engineering suggestions were put in operation, the fire waste began to be checked. It was as if theretofore—fire had been considered an act of God, with which it was impious to interfere, and no one had assumed the responsibility!

You know the story Charles Lamb tells of how they first began to eat roast pig in China. I don't know why they kept pigs in China before they ate them (unless to annoy the neighbors!) but they evidently did. He tells the story of a Chinese country house being burned and pigs being roasted inside it. The man came home and poked around in the debris and got his fingers in roast pig and licked them. He "allowed" it was good, as they say out West, and passed a piece over the fence to a neighbor, and to his father when he came home, and to

his brother when he came home, and soon it was echoed throughout China that roast pig was a wonderful delicacy, that no one had known anything about. Lamb says in two or three months country houses began to burn all over China!

Then a man with a larger brain than the others conceived the idea that it wasn't necessary to burn a whole country house to have roast pig; that ovens and other things might be devised.

It was the application of that kind of keen and cutting intelligence in New England that began to reduce the disgraceful fire waste. They began segregating the hazards, and dividing floor areas and stopping off floor openings. It soon became clear to this little band of engineers who took up the work that there were no fire prevention standards in this country for anything. Twenty years ago there was no electrical code; anybody could put wires anyway he pleased and fires began to result. There were no standards for hose couplings, so that when one burning city was appealed to by another and it would go over there with its engines, it couldn't couple its hose to the couplings of the neighboring city. The hose men had never made any attempt to standardize the hose couplings. I heard the other day of a city in Indiana that had a fire and couldn't couple its hose to its own hydrants!

We have standardized those couplings; standardized fire hose and other apparatus, fire doors, fire windows, automatic extinguishers, and so on. Gasoline and gas-using devices, acetylene gas devices, all these things affecting fire hazard and affecting fire protection, have been standardized.

That little meeting held in New England about 20 years ago of the National Fire Protection Association—which now numbers some three thousand associate and one hundred active members, of which the American Institute of Architects is one—has been responsible for these things Our committees sit all the time, take cognizance of developments in the electrical industry, developments in all lines of industry, which it must do, naturally, because development in invention and science has been so rapid for the last 25 years that these committees must be alert continually to take up every new development, especially electrical development.

This work was sedulously kept up for 15 years and then one day, at our annual meeting, one of our members arose and called our attention to the fact that while we had been meeting for 15 years and making these standards for checking the fire waste, the fire waste had gone on increasing in geometrical progression! "We are not checking the fire waste," he said, "Why pour our lives into this work when it is coming to nothing?" You see it was psychological with us, too; our vision had been limited. But that speech jarred us into a larger realization of our responsibilities. We saw that not only must we continue to make these standards and offer them to the people as we do, but we must attempt to teach the people to adopt them—and that was a big enough job for anybody!

We had two hundred dollars in the treasury with which to educate the American people. (Laughter.) We thought that we would spend it all in one splash, so we got out a beautiful bulletin, the most impressive bulletin anyone ever wrote, I am sure, and sent it to every newspaper from Maine to California—and it went into editorial waste-baskets from Maine to California. The newspapers didn't know any more about the fire waste than the ordinary citizen. It was a new idea. Nobody had thought of fire prevention.

We were somewhat discouraged, because we looked to the newspapers to make public opinion—and sometimes they do! The Boston *Herald* came to our rescue. Mr. Buxton, the editor of the Sunday *Herald*, sent down to our office and said, "I am amazed at these figures you present. If you will get us up an article for the Sunday *Herald* we will give you a whole page in this matter. We think it of sufficient public importance to set it out in that way." So we got up this page for Mr. Buxton. He had his staff artist surround it with flames and firemen carrying babies out of four-story windows. You know what a staff artist can do when he sets out to make something impressive! That is the kind of a page the *Herald* printed, and it did impress the other newspapers of the country.

You have a Committee on Public Education and they will collide with this same thing. The papers will assume that because you are architects the public isn't interested in what you are doing. They thought, because we were engineers, that nobody cared about us. I think if two editors did read our bulletin—I don't think they did, but if they did, those few concluded it was an advance notice of some fire extinguisher advertisement! I know they never suspected we were a body of men innocently trying to do some good in our day and generation.

But they copied this matter from the *Herald* and we got press clippings, and we wrote the editors complimenting them upon their intelligence in seeing the importance of this matter, and we received very gracious replies from most of them saying they would be glad to co-operate in the work we were doing.

So we began our press bureau. We got about 40 newspapers out of that article in the *Herald* because the exchanges read it where they would not read our original stuff; and gradually in the last three years since we have been doing this public educational work we have added papers, so that now we have about 150 daily newspapers that get all our bulletins and magazines, and reprint them frequently, and send out in their own cities and have examinations made of fire hazard conditions, and print editorials thereon. So we have got going in that way.

We then began a campaign for the adoption of fire prevention days. The states are doing that all over the country; about thirty states now have regular fire prevention days—usually adopting the date of the Chicago, Baltimore, San Francisco or Atlanta conflagrations. Even in Canada they are doing that, following the Toronto fire.

We are also getting fire marshals appointed and thus the states themselves are inquiring into the causes of fires. That is educational and things do not appear to be so hopeless now—we have been pegging along at this three years—as it did when we first began.

We thought we would make an attack on the insane 4th of July. By the morning of the 4th, the horses of the fire departments all over the country were exhausted running to fires caused by fire-crackers on the night of the 3rd, so that if a big conflagration should come they couldn't fight it—the horses and men would be worn out. We got out a bulletin declaring against the cannon-cracker and the toy pistol; we pictured the horrors that always follow the Fourth, and sent it to all our members. They took it to the city councils and introduced ordinances—and they didn't pass, because the small boy was loaded up with fire-crackers and the merchants were loaded up with stocks, and they didn't want to be disturbed.

To be concluded in May Number

Residence of H. P. Palmer — Photo by Angelus Studio
D. L. Williams, Architect, Portland, Oregon

Residence of H. P. Palmer
D. L. Williams, Architect, Portland, Oregon

Living Room
Residence, H. P. Palmer
D. L. Williams, Architect, Portland, Oregon

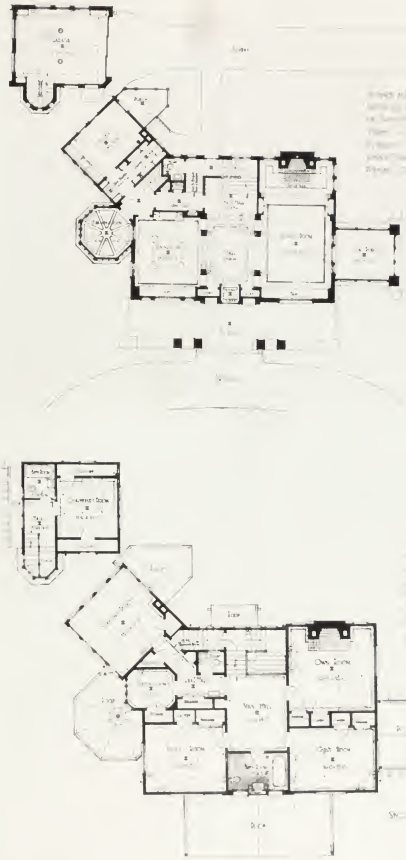
Photo by Angelus Studio

Staircase and Entrance Hall
Residence, H. P. Palmer
D. L. Williams, Architect, Portland, Oregon

Photo by Angelus Studio

Dining Room — Photo by Anzelm Studio
Residence, H. P. Palmer
D. L. Williams, Architect, Portland, Oregon

Ingle Nook — Photo by Anzelm Studio
Residence, H. P. Palmer
D. L. Williams, Architect, Portland, Oregon



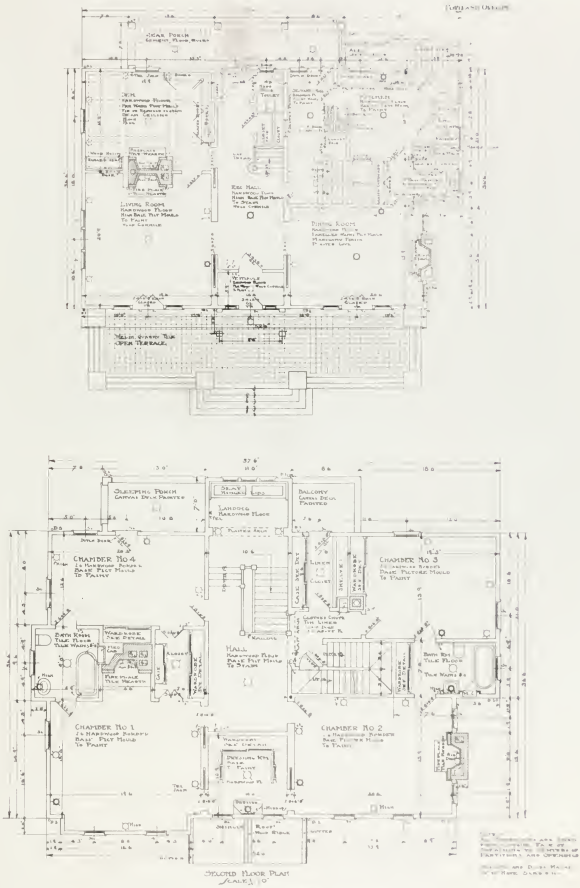
Floor Plans
Residence, H. P. Palmer
G. L. Wilson, Architect, Portland, Oregon

Residence of Walter B. Honeyman Photo by Angelus Studio
D. C. Lewis, Architect, H. Goodwin Beckwith, Associate, Portland, Oregon

Library Photo by Angelus Studio
Residence of Walter B. Honeyman
D. C. Lewis, Architect H. Goodwin Beckwith, Associate, Portland, Oregon

Dining Room — Photo by Angelus Studio
Residence, Walter B. Honeyman
D. C. Lewis, Architect, H. Gaudwin Beckwith, Associate, Portland, Oregon

Living Room — Photo by Angelus Studio
Residence, Walter B. Honeyman
D. C. Lewis, Architect, H. Gaudwin Beckwith, Associate, Portland, Oregon



Floor Plans
Residence, Walter B. Hunerman
D. C. Lewis, Architect, H. Gordon Richards, Associate, Portland, Oregon

Residence of Mrs. Belma D. Jacobs. Photo by Angeles Studio
Johnson & Maher, Architects, Portland, Oregon.

Living Room Photo by Angeles Studio
Residence, Mrs. Belma D. Jacobs
Johnson & Maher, Architects, Portland, Oregon

The H. P. Palmer Residence, Etc.

By JACK DREW,
Interior Decorating Department, Lipman, Wolfe & Co.

ORIGINALITY and exclusiveness is nearly always to most people a reason for criticism. Everything we are used to and all things of which we know have become a part of our existence, with the result that we no longer notice them. Even we, personally, are a part of our every day life and continue to be so unless disturbed through some unusual cause.

When we compare the style or manner of building at the present time with the same of many years ago we wonder how it was possible that so many features, at present hardly noticed any more, could have been overlooked, but we forget that in those days people were no worse than nowadays. Have you ever heard the remark passed? Have you ever noticed the looks of surprise when something unusual turns up, and have you ever stopped to consider why people condemn or praise?

A house built and designed like all other houses, which already were built as copies of such constructed before, is apt to be to the liking of most people, for it has become a part of their everyday life and surroundings. Hail! to the architect who designs something exceptional to the old rule of copying and following the everyday routine. Honor to the architect who designed the Palmer residence, and honor to the owner who had the courage to accept the plans! The result has been another feature of attraction to our city of roses, another stepping-stone to make Irvington one of the most beautiful residential sections in our fair city.

A building will always appear to its best advantage when built on the corner of two streets, and, naturally, the architect while planning the house will make use of this to its fullest extent. No better use could have been made of this advantage while building the Palmer residence, and it stands to reason that the side facing south should have been the conservatory or sun-room. When we hear of the sun we naturally feel good and think of flowers, and it is impossible to imagine flowers without happiness.

The exterior of the Palmer residence is strong and severe and entirely in keeping with the nature and climate of the Northwest. It is in a style and period all by itself, reminding you of the feelings and sensations during your first trip "Out West."

The first story of tapestry brick in subdued colors and impressive construction reminds you of the mountainous soil prevailing around this part of the country. The woodwork and trim, through its finish and color, supplying the finishing touches to the aspect, and in the midst of this a glorious sun-room filled with flowers and plants of every description.

"My house is my castle," signifies the main entrance to the house—majestic and impressive, simple and logical in its construction, and no fear that any other door will be taken for the main entrance. Upon entering the foyer hall, the entire impression of severity changes, and we come under the influence of a feeling reminding us of home—home in all its details. In front of us a well-designed and practically laid out stairway, to the left the dining-room and to the right the living room. It is impossible to mistake one room for the other. The living room being on the same level as the entrance hall, is too inviting to be taken for anything else, while the dining room next to the breakfast room and kitchen, with butler's pantry, is built a little higher than the entrance hall, or southern part of the house. The woodwork in the living room is finished partly in ivory color and natural mahogany in eggshell finish, while the wall covering is of a stripe design in a fawn color. The drapery work, such as window draperies and portieres, is made of an imported cretonne in perfect harmony with the color scheme before mentioned. The specially-made rug, which is naturally in tone with everything else in this room, supplies the foundation for the mahogany furniture of a pleasing and comfortable design. Needless to say another attractive feature of this room is the entrance to the conservatory or sun room, separated from the living room by two French doors and side lights. It is impossible to feel gloomy and unhappy amid such surroundings. Plenty of light and a glorious floral effect will always envelop you.

The dining room is in a finish not very often seen. First of all, on account of the more than ordinary expense of construction, and, secondly, on account of its originality. The walls and ceilings are made of a natural mahogany with a beautifully finished panel effect. Not the smallest detail has been overlooked to make this room complete in every respect. Also, the electrical fixtures of special design, finished in dull silver, together with the furniture, are entirely in keeping with the rest of the room. The necessary color effect is obtained with the draperies made of an imported French cretonne, and, notwithstanding, the interior is entirely different from most dining rooms. A homelike and pleasant feeling is with you at all times.

The architect of the Palmer residence, Mr. D. L. Williams, has certainly all reason to be proud of his original work. He shows a perfect knowledge of construction and acquaintanceship with all building materials. Another good example of this is the breakfast room built in an octagon form, and, like the dining room, entirely finished in wood construction, except for the ceiling which is made of plaster in antique gold finish. All woodwork in this room is of Circassian walnut and it is unnecessary to mention that the effect is elaborate, while at the same time dignified and restful. The draperies are made and designed not only to supply color in this room, but also to act as window shades. The material is of a French gray color with mulberry border design, and the rug also made in an octagon shape to fit the room is of a color to match the draperies.

In selecting the required wallpapers, draperies and rugs, Mrs. Palmer has shown unusual taste and color feeling throughout the entire house. The responsibility of accepting wallpapers and drapery schemes for a house with as many rooms as the Palmer residence has, is no easy task and may easily lead to mistakes and miscalculations, but throughout the entire house an harmonious and pleasant color scheme is noticed.

The second floor and bed rooms and sitting room, as well as the dressing room and sleeping porch, are unique and individual, and entered from the second floor hall, each being separated from the other. The color scheme of the second floor is naturally finished as a continuation of the main entrance or foyer hall.

The billard room, situated in the lower part of the house, has not been overlooked in trying to obtain a unique and original effect, while the garage, separated from the house and containing quarters for the chauffeur, is another feature to make the entire residence complete and artistic.

Sanitation and Cleanliness

By C H Wilder

IN a recent speech before the Denver County Medical Association, January 30, 1913, Dr. Harvey L. Wiley, former chief chemist of the United States, among other things, said: "Sometimes I wish that a holocaust would destroy every dwelling in the United States. Then the two death-bringing diseases, tuberculosis and cancer, would be banished."

The average reader considers this remark a trifle exaggerated, and, in reflecting, endeavors to lead himself, not to criticise Dr. Wiley, but to think that this eminent authority did not have time to segregate his, and other apparently immaculate homes, kept spotless under the generalship of one of the dearest in all the world, with a corps of servants armed with brooms, dustpans, carpetsweepers, and last, but not least, that foe-to-dirt-equally-as-great-a-germ-spreader the unsanitary so-called portable cleaner at her command.

No, Dr. Wiley meant exactly what he said, and, if you are acquainted with the great efforts the different medical societies are making to bring about the home, not beautiful, but sanitary, you will agree with me that Dr. Wiley could and should have said a great deal more.

The home which is kept spotlessly clean by the method which has been in vogue since Pharaoh cleaned the pyramids (the broom and dustpan) coupled together with the carpet sweeper, remind the writer of the boy who scrubbed his face raw with soap and pronounced the job complete merely because he had no means of seeing whether or not the back of his neck needed scrubbing, in that the house looks clean, yet by test is absolutely filthy with those dreaded germs of disease—tuberculosis, meningitis, pneumonia, catarrh, smallpox and others without mention, and as in the case of appendicitis the cause must be cut out, so must these dreaded, infinitely small, indetectable germs be taken out and only before they get in. There is only one way to entirely and successfully do this and that is by means of a satisfactory stationary system of air cleaning.

By this means your carpets, rugs, bare floors, walls, ceilings, draperies, mouldings, bedding, mattresses, etc., of not only the home, but schools, churches and all public meeting places are entirely rid of that murderer of the world—DUST.

An eminent physician says: "Were we able to eliminate the communication of germs by the means of dust, nine-tenths of all contagious diseases would disappear." At this point let me take up the matter of the portable, which I have so ungentlemanly-like slammed. The carpets and draperies of the home and other buildings we know to be hot beds in the culture of disease germs. The agency which sucks the germ-laden dust out of the carpet is air and this air being inhaled into the machine naturally must be exhaled somewhere, why, merely because the machine, like a rubber balloon, has a limited capacity and over this capacity the machine must either burst or stop working, therefore the manufacturers have made allowances to have the filthy, germ-laden, impure air exhausted directly back into the room to be breathed into, and endanger the health of that aforesaid dearest, sweetest and her offspring whom you would not part with except through the act of divine providence and undoubtedly then through the agency of dust.

Prove this for yourself, if you possess a portable, call your family physician and have him obtain for you what is known as a petrie, or germ culture plate, hold this plate about five feet from the machine, while it is working, for say a period of ten minutes. Next lay the plate away in a warm, dark drawer for forty-eight hours, at the end of which time take it out, look at it, and—think. In the words of the physician these greenish yellow marks you are looking it spell disease, dissolution, death in the way of tuberculosis, typhoid, meningitis, scarlet fever, diphtheria, etc.

An instance of the unsanitariness of these little contemporaries is a case brought to my attention of five families chipping in, in order to save expenses, and buying a portable. One of these families had, prior to this time, been visited by the scarlet fever bug and each of the other four families in turn, came down with this dreaded disease. The head of one of the families being a physician his curiosity was aroused. His research ended at this wonderful little unsanitary, labor-saving device so commonly carried from house to house by scores of unthinking men desirous of obtaining a livelihood and those philanthropic persons desirous of aiding some church or society by cleaning houses with the machine purchased to assist in the cleaning of this church or assembly room. Here the physician found a veritable hot bed of scarlet fever germs.

Surely in this case an ounce of prevention would have been worth, not one, but hundreds of pounds of cure.

The stationary cleaner, displacing a sufficiently large volume of air, eliminates this liability of taking all of these unseen enemies, dust, dirt and other litter from the carpets, draperies, mouldings and furniture by means of a cleaning tool, hose and pipe line connecting the farthest corner of the house to the machine in the basement which in turn throws the bad air out of doors. It also takes the sharp particles of grit, which cut and ruin the carpets, from down deep in the nap and with the exception of a sized, or air-tight carpet, will catch whatever dust, moths, etc., might collect between the carpet and floor.

In selecting a stationary cleaner, especially for the residence, the owner should be very careful. He should always bear in mind, no matter what machine he is considering, that it is a large volume of air, and no other agency at a velocity of at least 2500 feet per minute that does the cleaning and the larger the volume of air per minute at the tool the larger the inrush of dust at the same point. True it is, vacuum has something to do with this inrush of air, but why have more vacuum than necessary? It only increases the power of consumption, the cost of maintenance as the more vacuum you have the more complicated your machinery must be to produce it. Also the more vacuum you have the less efficiency in carrying capacity for the reason that by increasing your vacuum you rarefy your air one-thirtieth for every inch of vacuum (mercury) produced and it is hardly necessary to tell you that air at its natural density has a greater carrying capacity than air reduced one-third as is true with some types of machines. The owner should select a machine as near fool and accident-proof as possible, for the reason that very few men and women are mechanics and it is disgusting to start cleaning and find that the machine required the aid of a mechanic to make certain adjustments in order to start it.

A centrifugal fan is much preferred in that it exhausts more air and is free from the attendant disorders of the pump type, being simpler and more efficient.

Regarding the saving of labor, one owner claims his house is cleaned clean in one-third the time required by the ancient methods. Another says that his wife claims she is able to clean in 19 minutes what formerly required two

hours. But why put it so strong when, if we can do away with the "women's weapon," the chief home drudgery and have the home absolutely clean, as near surgically clean as is possible to make it, not twice (Spring and Fall) but every day in the year we have provided for the entire household as great, if not greater convenience, just as essential if not more so than the best heating, lighting system or any other convenience about the house.

Capital and thought have perfected a wonderful convenience, however, to be appreciated, the public must be educated to realize the fact that the coming years will be years of sanitation and of cleanliness and the stationary cleaner in the one big influence with which to carry on this great work.

Definitions

The Tuec—The one PERFECT cleaner.
To Tuec—To clean by means of the Tuec.
Tueced—A place that has been cleaned by the Tuec.
Tuecites—Those swearing by Tuec.
Tuecitis—The boosting germ—found in all Tuescites.
Tuecess—Female Tuecite.
Tuecarium—The home, made a sanitarium, by means of the Tuec.
Gotuec—A phrase meaning "Get there!"—"Sic 'em!"
Tuecache—A severe pain suffered by competitors at the mention of Tuec.

San Francisco Fair Buildings

Splendid progress is being made in construction work for the Panama-Pacific Exposition, and thousands of men are now employed on the exposition site at Harbor View. Every one of the 14 exhibit buildings to be erected will be under construction during the coming July and will all be completed within a year from that date.

Orange trees in fruit and blossom will be a prominent factor in the remarkable building to be erected in the concession section of the exposition by Orange Blossom Incorporated, for the sale and manufacture of special candies during the exposition. The building, which has been designed by G. Albert Lansburgh, will cover a space of 60x80 feet and, constructed entirely of orange opalescent glass, will cost $25,000 to complete and furnish.

The executive committee of the exposition has approved the plans for the million dollar auditorium, which is to be erected in San Francisco's civic center, now under construction, and it will be ready by 1915. The auditorium will be of stone and, with the city hall, will set the keynote for the entire civic center.

The City of San Francisco a year ago bonded itself to the extent of $8,500,000 for the creation of the civic center with the construction of a new city hall. The exposition set aside $1,000,000 for the construction of the auditorium, which will house many of the great conventions to be held in San Francisco during the exposition year. The seating capacity is approximately 11,000. There will be minor auditoriums and banqueting halls in the building. It will be the finest of its kind in America. A feature of the main auditorium is to be an octagonal dome of glass, 190 feet in diameter.

George W. Stewart has been appointed musical director of the exposition. He is a resident of Boston, Mass., and was musical director of the St. Louis world's fair. He succeeded in bringing the leading bands of the world to that exposition and will undoubtedly do the same for the nation's celebration in 1915.

Matters of Supreme Moment

With the remarkable expansion along building lines now prevailing in Portland, the narrowness of the streets and the great desire to erect high buildings, without proper limitations, are questions of supreme importance. It is a hopeful sign that architects, realty men and property owners are evincing an interest and evidently desire to reach a sane and sensible conclusion. Recently there was held at the City Hall a meeting of these interests with the City Building Inspector and the Board of Appeal. (This meeting is referred to elsewhere in this issue.)

In New York and Chicago there is on foot a similar movement, as well as in other cities. One property owner in Portland put the matter in a blunt and common-sense form when he remarked that "no building should be higher than twice the width of the street it fronts." The objections to buildings of irrational altitude are that they interfere seriously with the matters of light and ventilation. These are highly important to be considered where streets are of insufficient width, and a congestion of traffic constantly occurs.

Onyx, Its History and Uses

By E. E. Gimer

[*Concluded from March Number*]

The New Pedrara quarries are over 5000 acres in extent, and this immense area of land is literally covered with outcroppings of onyx.

The color in Pedrara onyx ranges from virgin white, through the most exquisite tints of green, rose, yellow, brown and some blue appearing at times in delicate lines or veins, again in broad hands, in random flecks, or in cloudlike masses of rich color. It is this infinite variety of wonderful and beautiful mark and tint which lends to Pedrara onyx its chief charm, and places it in a class by itself as a decorative stone.

Marble, even the most expensive grades, when placed in an exposed position soon loses its polish, and becomes stained and streaked with rust, ink, smoke and grease. Once stained, the porous nature of marble causes the discoloration to spread throughout, and it is a well-known fact that stains on marble cannot be eradicated. This disadvantage does not appear in Pedrara onyx, whose texture is so fine that it is practically non-absorbent, and is impervious to stains of any kind. Again, its extremely close grain and great hardness make it susceptible to an enamel-like polish, which it holds longer than any other stone.

One of the most beautiful characteristics peculiar to onyx, and especially pronounced in Pedrara onyx, is its translucency, which gives an illusion of depth and greatly enhances the beauty of the stone, since by it one sees not only the coloring and marking upon the surface, but all that lies beneath the surface, subdued and harmonized.

Pedrara onyx can be sawed with the grain, across it or diagonally. Of course where greater solidity is required, as for heavy columns, or pilasters, the stone is cut with the grain. For wainscoting and other purposes, where strength is not an essential feature, onyx is cut across the grain, or diagonal to it. The latter method, of course, reveals better the wonderful shades and veinations of this material.

The following is the report issued by the Smithsonian Institution upon Pedrara onyx: Hardness, 3.5; specific gravity, 2.79; crystalline structure; microcolumnar; mineral nature, calcite. $CaCO^3$ 90.16; $MgCO^3$ 1.66; $FeCO^3$ 0.97; $MnCO^3$ 76; SiO^2 absent. [illegible] analyst, R. L. Packard.

In the catalogue of the onyx-marble specimens in the Smithsonian Institution, the only exhibit mentioned which

received distinguished adjective is No. 61,388, which reads, "Two fine slabs of white rose tinted travertine, highly translucent from the New Pedrara quarries on the peninsula of Lower California." The high translucency, marvelous coloring and simple richness of Pedrara onyx render it superior to even the rarest and most expensive grades of marble.

In the commercial world there is a certain three-fold standard before which any factor must be judged before it can be reckoned a success, that is, beauty, durability, economy.

In point of beauty, Pedrara onyx requires no defense. Not without reason has it been called "nature's most beautiful product." Of the rich and infinite variety of its color we have already spoken. This feature makes it possible to harmonize Pedrara onyx with any scheme of decoration, and to use it in conjunction with the different woods and the various imported colored marbles.

On account of its translucency, for artificial decorative lighting effects, Pedrara onyx has wonderful possibilities. Placing lights behind the stone serves to intensify its depths and exquisite color, and brings out its latent beauties.

Durability has reference not only to its lasting qualities but resistance, as well, to the havoc wrought by time and weather. It is quite evident that an object may last a hundred years and have lost all semblance to its original beauty at the end of 10. However, no better proof of the enduring qualities of onyx can be offered than those specimens of ancient art and architecture hitherto referred to, which today are intact and beautiful, when the race which served them is dust. The great hardness of Pedrara onyx, it being one and one-half times harder than marble, its fine texture, and consequent non-absorbent qualities, of course, add to its advantages in this respect.

In regard to economy, we do not contend that Pedrara onyx is a cheap material, but it is an economical one. If, in installing onyx, the initial investment may exceed that of marble or other material, the results are far superior, from every point of view, that no one regrets the greater expenditure. In connection with the ultimate economy of Pedrara onyx, there is another point well worth dwelling upon.

The Orpheum Theater of Seattle is one of the several costly and beautiful structures in that city where onyx has been utilized. The Moore Theater, also of Seattle, is another striking example of Pedrara onyx used for interior decorative effects. Seattle also boasts two of the handsomest banking buildings in the United States, the Union Savings and Trust Bank and the National Bank of Commerce, in both of which the interior decoration is carried out in Pedrara onyx. In the new L. C. Smith building, 42 stories high, now being erected in Seattle at a cost of one and one-half million dollars, the walls of the first floor, with its stores, corridors and vestibules are to be of Pedrara onyx.

In the new Spreckels' Theater in San Diego, a million-dollar structure, and one of the finest buildings of that character in the United States, the entrance and lobby (representing an expenditure of $20,000) and the walls and ceilings will be illuminated entirely through Pedrara onyx. On stepping into this lobby, one finds almost the realization of the childish dream of a fairy palace. The soft, glowing light, shining through the translucent onyx, summons out of its mysterious depths strange and beautiful colors and markings. The walls, the paneled ceilings, the wainscoting and pilasters all glow with the same mysterious radiance. The magnificent lobby is not only the most unique and beautiful in the United States, but probably in the world.

The Portland Architectural Glee Club

At a meeting held March 26, at the club rooms of the Portland Architectural Club, a glee club was formed. Eleven members were present and they elected officers as follows: William R. Boone, director; H. Goodwin Beckwith, president, and Roy Wright, secretary and treasurer. It was decided to meet weekly on Wednesday evening at 8 o'clock. Since the first meeting the membership has grown to twenty.

The club has been fortunate in securing the services of Mr. Boone, as he is a musician and director of rare ability. He is organist and director of music at the First Congregational Church and has had wonderful success with the Ad Club Quartet, a find of his own.

The several different pieces of music which were ordered have arrived and the club proposes to give their first concert on the evening of the first Friday in May, the night of the annual meeting of the Architectural Club in preparation for its grand concert and minstrel show to be given for the Architectural Convention in June.

The glee club is composed entirely of young men, and as it brings these men together once a week, it has been instrumental in creating a keen interest in the club.

Any young men who desire may join. They are most cordially invited to show up at the club rooms on Wednesday evening at 8 o'clock. They need not have a fine voice, for all that is asked is that they attend the rehearsals regularly.

Yours for a good time.

* * *

When a woman goes into a cigar store with a man she feels much as he does when he has to take lunch with her in a department store restaurant.

The man who tells the truth, the whole truth, and nothing but the truth at all times can never hope to be popular in human society.

* * *

Railroad Men in Vaudeville

The Harriman Club, comprising employes of the O.-W. R. & N., Southern Pacific and the Portland, Eugene & Eastern, recently gave a vaudeville entertainment at the auditorium of the Lincoln High School. All the stunts were well done.

* * *

Industrial Publications

Roofing Tin, the Taylor Bulletin for the Roofing Trade, for March, is at hand. The cover illustration shows a view of the high-pressure pumping station at Lehigh avenue and Seventh street. This is roofed with forty boxes I C 28x20 "Target and Arrow" roofing tin, made by the N. & G. Taylor Co., Philadelphia, Pa.

* * *

Idaho Capital Souvenir

Tourtellotte & Hummel, architects of Boise, Idaho, have issued a very handsome souvenir booklet of the new Capitol at Boise, which this firm planned. A brief, but able introductory by J. E. Tourtellotte appears. Among the illustrations we note these of the fourteen members comprising the Capitol Commission and the two architects, J. E. Tourtellotte and C. F. Hummel, as well as exterior and interior views. The souvenir is handsomely printed in fine half-tones on fine book paper, and is well worth preservation.

Richmond Vacuum Cleaner

The "Richmond" is one of the largest and best vacuum cleaning machines in the world sold under the trade mark. It is manufactured by the Richmond Radiator Company of New York and Chicago, successors of the McCrum Howell Company, and is distributed in the western territory by the Cameron-Schroth Company of Chicago, with offices in Seattle, Spokane and Portland. Grover McHugh, 508 New York Block, Seattle, and 225 South Howard street, Spokane, is the special Northwestern agent. John H. Niedermark, 603 Board of Trade Building, Portland, is the company's representative for the state of Oregon.

"Tufbrec" a New Fire-Proof Material

In the vicinity of Mount Angel, Oregon, there is a deposit, covering hundreds of acres, of a new fire and sound-proof building material, to which has been given the name of "tufbrec." It lies at the top of a level plateau, at an elevation of some 1250 feet. In composition and origin, "tufbrec" comprises fragments of volcanic matter, ejected from the earth at a high point of fusion. In cooling, the mass became honeycombed with cells, many of them sealing and containing air. These give the substance its peculiarly valuable qualities as a sound deadener and fire-proof material. Local investors have purchased the deposit, and propose to develop it, placing the product on the market.

Performs Big Undertaking

It is a matter upon which progressive Portlanders should congratulate themselves, that, with the city's growth, there are institutions here able to keep up with all demands, and that it is no longer necessary to go outside for help. Special reference is made, in this connection, to the completion of an important order recently filled by the Pacific Iron Works, located at the east end of the Burnside bridge. The Pacific Iron Works recently completed 85 massive cast-iron columns, weighing 160 tons, for the Morgan-Bushong building, now under construction at Seventh and Washington streets. It requires facilities, equipment and skill to make such castings, and the Pacific Iron Works fills all these requirements. Manager Oscar E. Heintz says present business in his line is excellent, and takes an optimistic view of future prospects.

Modjeski & Angier, Inspecting Engineers

Announcement is made that Ralph Modjeski and W. E. Angier, both members of the American Society of Civil Engineers, have opened a branch office as inspecting engineers at suite 407-408 Corbett building, Portland. The firm's work includes inspection of structural steel, cement and other building materials, rails and rolling stock. The firm maintains its main office at 220 South Michigan avenue, Chicago, with branch offices in the Parrott building, Pittsburgh, Pa., and the Architects' building, New York, N. Y.

Mr. Modjeski also announces his services as consulting engineer. He is a member also of the British Institute of Civil Engineers. There is no engineer in the United States more favorably known than he, and the magnificent bridge across the Columbia near Portland, erected for the North Bank road, is a lasting monument to his skill

Excellent Piece of Work

While it was fully the intention of the publishers in its recent issue, to have called attention to the excellent work done in the new Hotel Oregon, which structure was featured by the Columbia Wire & Iron Works, of Portland, through inadvertence, it was overlooked, which is regret. All the fire escapes, elevator cages and the bronze railings in the hotel office were supplied by this well-known company. They are unexcelled.

Trade Notes

H. B. Shofner, of the Oregon Art Tile Company, is on an extended business trip to Vancouver, B. C.

F. A. Philo, of the Oregon Art Tile Company, has returned from a month's trip spent in the Eastern states.

Nitschke & Andrae, modelers, carvers and plaster decorators, announce their removal to 309 East Eleventh street, near Hawthorne avenue.

McHolland Bros., 669 E. Everett street were the general contractors on the H. P. Palmer residence shown in this issue.

Architects Parr, MacKenzie & Day, Vancouver, B. C., have moved their office from 570 Granville street to 826 Vancouver Block.

F. T. Crowe, of F. T. Crowe & Company, Seattle, Washington, spent several days in Portland visiting the local office of the company.

Architects Bebb & Mendel, Seattle, Washington, formerly located in the Denny Building, have secured temporary quarters at 118 Haight Building.

Architect B. G. McDougall, of San Francisco, was a recent visitor in Portland on business regarding the new Pittock Block.

B. J. Flynn, of Callaghan & Flynn, was a visitor at their local office. Mr. Flynn has returned from an extended trip East.

D. G. Russell, Sec'y.-Treas. and Manager of the Tenino Stone Company, of Tenino, Washington, was a recent visitor in Portland on business.

Charles W. Heal with the J. D. Tresham Manufacturing Company, contemplates taking a trip to Honolulu in the very near future.

Architect Ellis F. Lawrence has returned from a business trip to San Francisco. While there Mr. Lawrence attended the Architectural Exhibit.

Architects Doctor, Stewart & Davie, Vancouver, B. C., have moved their office from the Arts & Crafts Bldg., to larger quarters in the Bower Bldg.

Architect Edgar M. Lazarus, of Lazarus & Logan, has returned from a two months' trip spent in the Eastern states and his old home at Baltimore.

Denny Renton Clay & Coal Company, Seattle, Wash., will furnish the terra cotta on the Wasco County Court House, at The Dalles, Oregon.

Lipman, Wolfe & Co. furnished the carpets, rugs, draperies, lace curtains and cretonnes for the H. P. Palmer residence shown in this issue.

F. H. Page, representative of M. L. Kline, has returned from a successful business trip to the Coos Bay country.

L. A. Spear, general manager of the Washington Brick, Lime & Sewer Pipe Company, of Spokane, was a recent visitor at their local office.

Ray Peterson, with Architects Bennes & Hendricks, has returned from a three weeks' trip through California.

O. E. Lutz, manager of the Mission Marble Works, 141 Union avenue North, has returned from a business trip to San Francisco.

J. H. Spear, president of the Washington Brick, Lime & Sewer Pipe Company of Spokane, Washington, was a recent visitor at their local office.

Architect James Schack, Seattle, Washington, with offices formerly in the Downs Block, has moved to larger quarters in the new Lippy Building, Third and Columbia streets.

Fred W. Eastman, manager of the Far West Clay Company, Tacoma, Wash., was a recent visitor in Portland on business. Mr. Eastman having just returned from the Brick Manufacturers' Convention held in Chicago.

H. B. McMaster, of the Publicity Bureau Associated Metal Lath Manufacturers, Youngstown, Ohio, gave an illustrated lecture to the architects at the Architectural Club Rooms on Friday evening, March 28.

Specht & Strine, Architects, 116 Behnke-Walker Building, has been dissolved, Mr. Strine going to San Diego, Cal. The new firm of Specht & Goulding will continue the business at the present address.

Architect Elmer C. Andrus, Los Angeles, California, has moved his office from the Wright & Callander Bldg., to 619 Higgins Building. Catalogues and samples will be appreciated.

The Newberg Face Brick Company, 803 Oregonian Building, will furnish their famous Newberg Red Face Brick for the City Hall at Newberg, and the High School at Forest Grove.

The Pacific Face Brick Company are furnishing their Colonial Brick for the Ainsworth School, White Plastic Brick for Cohn Bros.' Building Third and Yamhill streets, and white dry press for the Platt & Platt Building, Park and Washington streets.

The Laura Baldwin Doolittle Studios, Eilers Building, furnished and decorated A. J. Johnson's residence, Corvallis; Dr. Lloyd Irvine's residence and Dr. Belle Ferguson's residence, this city, and is now furnishing and decorating two music rooms for Eilers Music Co.

The Washington Brick, Lime & Sewer Pipe Company, Spokane, Washington, will furnish the terra cotta and face brick for the new 14-story Davenport Hotel, Spokane; the terra cotta and brick for the Elks Temple Building, Seattle; R. M. Fouts Apartments, Seattle, Washington, and the Blasier Building, Vancouver, Wash.

Architect C. A. Riggs, of Spokane, Wash., who has been engaged to prepare plans for the new county buildings for the Inland Empire city, was in Portland recently inspecting the building on the Multnomah Farm, and conferring with Architects Bridges & Webber.

John H. Niedermark, agent of the Richmond Vacuum Cleaning Machines reports the installation of stationary machines in the Failing School. Whitehouse & Fouilhoux, Architects, will also install a machine in the new University Club Building now in course of construction at Sixth and Jefferson streets, and one in the Ainsworth School, Portland Heights. F. A. Naramore, Architect.

The Mission Marble Works, 151 Union avenue North, report furnishing the marble for the interior of the Eugene Loan & Savings Bank, Eugene, Oregon, and will furnish the marble for the Morgan Bushong Building, Broadway and Washington, also the marble on the bank building recently finished at Hoquiam, Washington.

The Parelius Manufacturing Company furnished all the mill work in the H. P. Palmer residence shown in this issue. The dining room is finished throughout in San Domingo mahogany and the breakfast room in Circassian walnut.

"Why Not a Fire-proof School House, a Short Talk on An Important Subject," is the title of a brochure by Ernst Kroner, the Portland architect. The title fully conveys the nature of the contents.

Austin Phillips, representative of Nobles & Hoare, Ltd., London, S. E., manufacturers of varnish, was a recent visitor in Portland. Mr. Phillips called on the local representatives of his firm, W. P. Fuller & Company. Mr. Phillips is completing a tour of two years.

PORTLAND.

Recent items selected from the Daily Advance Reports of The Pacific Coast Architect.

Store Building—L. R. Bailey Co., architects and builders, prepared plans for a two-story reinforced concrete store building for S. D. Vincent & Co. The building, which will be erected on East Forty-third and Sandy road, will be 90x80 in size and will cost 15,000.

Residence—Architect Charles N. Elliott prepared plans for a $3500 residence to be erected on East Ninetieth and Washington streets.

Residence—Architect W. L. Mills prepared plans for a two-story $6000 residence for L. W. Lawrence. Will have plaster exterior, brick foundation and trimmings and red tile roof.

Store Building—Architect Lee De Camp prepared the plans for a one-story fireproof store building to be erected in the rear of the Empress Theater.

Residence—Architects Specht & Strine prepared the plans for a one-story frame residence for H. P. Barber to cost about $3000.

Residences—Ellis F. Lawrence and Wm. G. Holford, associate architects, are preparing plans for a two-story frame residence to be erected at a cost of $15,000 for Mrs. James Malarkey on Seventeenth and Hawthorne Terrace. Mr. Lawrence and Mr. Holford are also preparing plans for a $15,000 residence to be erected on Montgomery Drive for John Keating. Daniel Kern is having the same architects prepare plans for a $25,000 residence to be built on North Fifteenth street in Irvington.

Bungalow—Architect E. E. McClaran prepared plans for a five-room bungalow for Myron Myers to cost about $3000.

Business Block—L. K. Kermott of Bend has commissioned Architect Newton C. Gauntt to prepare plans for a two-story brick business block to be erected in that city.

Residence—Architects Johnson & Mayer are preparing plans for a two-story residence for A. A. McDonald. The first story will be constructed of brick, and the upper stories of stucco and half timber.

Residence—Architect E. E. McClaran prepared plans for a two-story six-room colonial residence, to cost about $3500, for J. H. Leighton.

Store and Flats—Butterworth. Stephenson Co. prepared plans for and will erect a two-story frame store and flat building on Twenty-second and Halsey for Charles Hummel.

Bungalow—Arndt Anderson, architect and builder, prepared plans for a six-room bungalow for Alice E. Clark, to cost $3500.

Garage and Store—Architect A. J. McClure prepared plans for a one-story brick building 100x100 in size, to be erected on Twelfth and Alder for D. P. Thompson Co.

Bank Building—Architect Earl A. Roberts prepared plans for a bank building for the First Trust and Savings Bank of Roseburg. The building will be two stories high, 30x100 in size, of mission type architecture and will cost about $30,000.

High School—W. B. Bell and J. Terry Wilding, associate architects, have been commissioned to prepare plans for a high school building at Forest Grove. The building will be two stories and basement, having eleven rooms, and will cost $35,000.

Residence—Stokes & Zeller, architects and builders, prepared plans for a two-story Dutch colonial residence, to cost $5000, for John Meyers.

Residence—Architects Jacobberger & Smith are preparing plans for a two-story seven-room frame residence, to cost $3500, for E. Mathies of Asotin, Wash.

Addition, Residence—Parker & Banfield, architects and builders, prepared plans for an addition to the home of A. C. Emmons, to cost $3000.

Residence—Architects Johnson & Mayer are preparing plans for a two-story colonial residence to be built for Dr. John H. Boyd on Montgomery Drive at a cost of $5500.

Residence—Wm. Lawrence has commissioned architects Emil Schacht & Son to prepare plans for a two-story $9000 residence to be built on Twenty-first and Carter streets.

Rest House—Ellis F. Lawrence and Wm. G. Holford, associate architects, prepared plans for a brick rest house and office to be built for the Riverview Cemetery Association.

Business Block—Architects Emil Schacht & Son prepared plans for a one story brick building 50x100 for Eugene Hoch.

Residence—Architect Wade H. Pipes prepared plans for five-room cottage for Samuel Pierce, to cost about $3000.

Business Block—Architects Bennes & Hendricks have commissioned to prepare plans for a three-story brick building 50x80, to be built on Larrabee and East Broadway for C. Backstrom.

School—School Architect F. A. Naramore prepared plans for an eight story reinforced concrete school building to be located on East Sixty-ninth and Powell Valley road.

Residence—Architects Root & Hoose are preparing plans for a 2½-story frame residence, to be erected on Portland Heights by the Investors Building and Trust Company for C. G. Ruff, to cost about $10,000.

Factory—The Investors Building and Trust Company have commissioned Architects Root & Hoose to prepare plans for a five-story factory building 70x100, to be erected on East Seventh and Flanders streets at a cost of $50,000 for the Modern Confectionery Company.

Office Building—Architects McNaughton & Raymond are preparing the plans for a six-story fireproof building 50x100, to be erected by the Title and Trust Company on Fourth street near Stark.

Residence—Architect H. N. Fancher prepared plans for a nine-room two-story frame residence of Italian type for W. J. Micken, to cost $6000.

Garage—Plans were prepared by Architect L. D. Carter for a one-story concrete garage 20x50, to be erected on First and Bancroft by C. H. Feldman.

Store and Apartment—Architect Ernest Kroner is preparing plans for a two-story brick store and apartment building 57x90, to be erected by J. R. Ramsey in St. Helens at a cost of $8000.

Store and Hotel—Architect Auron H. Gould and Engineer W. W. Lucius have prepared plans for a four-story store and hotel building to be erected on First and Jefferson streets by W. W. Margulis at a cost of $40,000.

Apartment—Architect Frederick S. Allerton prepared plans for a four-story reinforced concrete apartment house to be built on Nineteenth and Overton by Harry Howard.

Residence—Architect Charles W. Ertz prepared plans for a brick veneer bungalow for Dr. C. H. Wheeler, to cost $3500.

Residence—Architects Johnson & Mayer prepared plans for a two-story frame residence, to cost $7500, for W. T. G. Thatcher.

Lodge Building—Architects Horandt & Anderson prepared plans for a two-story reinforced concrete building, to cost about $12,000, for the Lents Lodge No. 188, I. O. O. F.

Apartment House—W. B. Bell and J. Terry Wilding prepared plans for a four-story brick apartment for A. C. Ruby. The building, which will be located on Third and Montgomery streets, will be 100x100, have forty-five apartments and will cost about $75,000.

Grill—Reid Bros., architects, are preparing plans for a grill to be located in the Morgan-Bushong building.

School—Architects Parker & Banfield are preparing plans for a four-room frame schoolhouse 60x88 to be built in Parkrose at a cost of $8000.

Dairy Barn—Architects Parker & Banfield prepared plans for a $3500 building, 60x112 in size, for D. O. Fisher.

Residences—Ellis F. Lawrence and Wm. G. Holford, associate architects, are preparing plans for two residences to be built out of town, one a bungalow to be erected in Hubbard for R. S. Espey, and the other a two-story frame residence for R. S. Cram in Raymond, Wash.

Store and Hotel—Architects Root & Hoose are preparing plans for a four-story reinforced concrete building 100x100, to be erected by the Investors Building and Trust Company on Third and Couch streets, at a cost of $75,000, for A. C. Pike.

Lodge Building—Architect I. E. McClaran has been commissioned by the Tillamook I. O. O. F. to prepare plans for a two-story brick store and lodge building 80x101 in size, to cost $25,000.

Lodge Hall—Architect J. B. Clark prepared plans for a two-story store and lodge building for Seaside Lodge No. 88, Knights of Pythias, to be erected at a cost of $5000.

Residence—Architects Johnson & Mayer prepared plans for a seven-room residence to be erected on Seventeenth and Klickitat streets for T. G. Mullin.

Bungalow—Plans were prepared by Architect J. B. Clark for a $3000 bungalow for J. G. Seed, to be built on East Thirty-third and Hancock streets.

Store Building—Architect Earl A. Roberts is preparing plans for a one-story brick business block to be erected in Roseburg, Ore., by J. W. Perkins at a cost of $12,000.

Residence—Plans are being prepared by Architect Earl A. Roberts for an eight-room Swiss chalet, to cost $4000, for Wm. Beehtold. Mr. Roberts is also preparing plans for a two-story brick addition 34x50 to the Palace laundry on East Tenth and Everett streets.

OREGON

Bungalows—Marshfield. J. N. Eddy of Marshfield is preparing plans for one hundred bungalows of from four to seven rooms each, to be erected by a syndicate represented by W. J. Wilsey.

Club House—Eugene. The University Y. W. C. A. have had plans prepared and will erect a bungalow club house to cost about $2500.

Business Block—Eugene. W. D. Warnock is having plans prepared for a two-story brick building 81x162, to be used for business purposes.

Theater and Business Block—Lebanon. Jesse Seavey and L. R. Page will erect a two-story concrete moving picture theater, also a modern two-story concrete business block.

Dairy Barn—Eugene. Architect J. R. Ford prepared plans for a large dairy barn for A. H. Hinkson.

Library—Marshfield. The Marshfield Public Library Board will make application to the Carnegie association for an $18,000 appropriation with which to erect a library.

Church—Marshfield. Plans have been prepared for a church building for the Episcopal congregation. The building will be 50x84 in size, constructed of reinforced concrete and cost $15,000.

Lodge—La Grande. The Fraternal Order of Eagles announce that they will erect a modern business block and lodge hall 70x110.

School—La Grande. Architect John L. Slater has been commissioned to prepare plans for an eight-room concrete school building to cost $25,000.

Warehouse—Hood River. Stranahan & Clark have begun construction work on a brick warehouse building 40x72 in size.

High School—Halfway. Architect M. B. White of Baker prepared plans for a one-story brick union high school to cost $7500.

Library—Pendleton. The library board will make application to the Carnegie association for a $25,000 appropriation with which to erect a building.

Residences—Eugene. Architect J. R. Ford prepared plans for a $5500 residence for T. T. Godfrey and a $4000 residence for Mrs. A. R. Smith.

Jail—Astoria. The County Court of Clatsop County is having plans prepared for a two-story fireproof county jail.

Club—Eugene. Architect Curtis Gardiner prepared plans for a club house for the Eugene Country Club, to cost $2500.

Bank Building—Lebanon. The Lebanon National Bank will erect a modern two-story concrete business block.

Business Block—Lebanon. The C. B. Montague estate will erect a concrete building to be occupied by a theater and stores.

Hospital—Toledo. M. L. Morris has begun construction work on a two-story eleven-room hospital building.

Country Club—Albany. The Gun and Country Club has been incorporated for $5000 and will erect club buildings in the near future.

Business Block—Sutherlin. The Sutherlin Wine Company will begin construction work soon on a brick store building.

Theater—Astoria. The Peoples Amusement Company of Portland is having plans prepared for a modern theater building to be erected in this city.

Armory—Roseburg. State Architect W. C. Knighton is preparing plans for a $40,000 armory. The building will be constructed of concrete and brick. Architect Knighton is also preparing plans for an addition to the Soldiers Home in West Roseburg.

Lodge Hall—Seaside. The Knights of Pythias will erect a two-story lodge building at a cost of $5000.

Business Block—Roseburg. J. W. Perkins has had plans prepared for a one story brick business block 80x102 to cost $15,000.

Bungalow—Eugene. Architect J. R. Ford prepared plans for a modern ten-room bungalow for T. A. Campbell.

SEATTLE.

Department Store—Architect John Graham is preparing plans for an eight-story addition of reinforced concrete construction to the Bon Marche, to cost $400,000.

Residence—Architect E. E. Green prepared plans for a $10,000 two-story brick veneer residence for Dr. C. R. Roebuck.

Residence—Architect Charles Haynes is preparing plans for a two-story brick veneer residence to cost $7000.

Bank Building—Bebger Bros., architects, are preparing plans for a two-story reinforced concrete bank building to be erected in Kalama at a cost of $25,000.

Addition to Iron Works—Architects Saunders & Lawton will start plans soon for a $100,000 addition to the plant of the Astoria Iron Works.

Factory—The Zimmerman-Degan Shoe Company announce that they will double their plant at a cost of $100,000. Architects Saunders & Lawton will prepare the plans.

Residence—Architect V. W. Voorhees prepared plans for a 2½-story brick veneer residence for Mrs. H. Lewis, to cost $12,000.

Library—Architect W. Marbury Somervell has been commissioned by the library board to prepare plans for a $30,000 branch library building of fireproof construction.

Residence—Architect W. Willatzen is preparing plans for a two-story frame residence, to cost $8000, for P. E. Snodgrass of Eugene.

Residence—Architect R. E. Borhek of Tacoma prepared plans for a $15,000 fireproof residence for F. A. Berne.

WASHINGTON.

Training School—Waitsburg. Architects Osterman & Seibert of Walla Walla prepared plans for a three-story school building to be erected by W. G. Preston.

Packing Plant—Davenport. Robert Joslin will erect a modern sanitary packing house at a cost of $5000.

Municipal Building—Puyallup. Architect Roland E. Borhek of Tacoma is preparing plans for a $25,000 city hall.

Remodeling Business Block. Walla Walla. O. O. Denny of Seattle will remodel the Denny Building in Walla Walla at a cost of $10,000, which was recently damaged by fire.

Business Block—Reardon. E. K. Finrow & Co. will build a two-story brick business block 50x110.

Railroad Bungalow—Morton. The Milwaukee Railroad will erect a fourteen-room bungalow to be occupied by the employes of the company.

Sanatorium—Soap Lake. John Nygran of Wenatchee announces that he will erect a two-story reinforced concrete sanatorium.

Garage—Tacoma. Architect I. C. Irwin has been commissioned by August Von Becklin to prepare plans for a two-story concrete and brick garage to cost $25,000.

Depot—Marcus. The Great Northern Railway will build an $8500 depot at this place.

Rooming House—Raymond. Architect C. E. Troutman of Aberdeen is preparing plans for a three-story reinforced concrete rooming house.

Business Block—Pasco. Ed Harrigan will replace his buildings recently destroyed by fire with a modern concrete and brick business block.

School—Adrian. Bonds for $10,000 were voted for the erection of a modern school building.

School—Winthrop. Architects Heath & Gove, Tacoma, prepared plans for a $15,000 two-story brick school building.

Comfort Station—Tacoma. Architects Dugan & Lewis are preparing plans for a $10,000 comfort station to be erected in Wight Park.

School—Spokane. Architect Robert C. Sweatt is preparing the plans for a two-story fireproof school building to cost $43,000.

Warehouse—Tacoma. Architect I. C. Irwin is preparing the plans for a four-story brick warehouse for the California Wine Company, to cost $40,000.

Poor Farm Buildings—Spokane. Architect Archibald Rigg has been selected by the county commissioners to prepare plans for the proposed $50,000 improvements at the county poor farm.

Church—Aberdeen. Architect C. E. Troutman prepared plans for an $8000 church building for the St. Andrews Episcopal Church.

Residence—Tacoma. Architect C. W. Lundberg prepared the plans for a $5000 residence for George Frazenberg.

Club Buildings—Spokane. Zittel & Rigg have completed revised plans for the three-story $60,000 building for the Knights of Columbus.

City Hall—Newport. Architect F. E. Lehnkuhl has been commissioned by the city to prepare plans for the construction of a city hall.

Residence—Tacoma. Architects Woodroof & Constable are preparing plans for a $,000 residence for W. F. Wolford.

Apartment House—Spokane. Architect W. A. Ritchie prepared plans for an apartment house for T. B. Guest.

School—Ephrata. The Ephrata school district will issue $25,000 bonds with which to erect a modern school building.

Natatorium—Spokane. John W. Duncan, park superintendent, has prepared plans for a public natatorium and rest house for Sinto Park, to cost $39,000.

Garage—Aberdeen. J. C. Hogan will build a two-story concrete garage 50x130.

City Hall—Montesano. Plans have been submitted in competition by Aberdeen architects for a $15,000 city hall.

Elks Home—Aberdeen. The Elks are planning to build a modern four-story fireproof lodge building to cost $75,000.

Paper Plant—Opportunity. The Inland Empire Paper Company will start work at once on a three-story factory building to cost $35,000.

Remodel Hotel—Ellensburg. Wolf & Nelson will remodel the Majestic Hotel at a cost of $13,000.

IDAHO.

Ice House—Lewiston. The Idaho Ice and Cold Storage Company are making arrangements to erect a cold storage house with a capacity of 1200 tons.

Laundry—Twin Falls. The Troy Laundry Company has started the construction of a brick laundry building 50x125, to cost $8000.

Hall—Inkom. Architect W. A. Samms of Pocatello has prepared plans for a two-story hall to be built by Mr. Pledger.

Hotel—Inkom. G. A. Blanchard will erect a modern 30-room hotel building at a cost of $10,000.

Business Block—Pocatello. Architect Arthur Elliott is preparing plans for a five-story steel and concrete business block for J. C. McNichols.

Business Block—Lewiston. John Davies will erect a two-story brick business block to cost about $15,000.

School—Montour. Bonds for $6700 have been voted with which to erect a school house.

Business Block—Kellogg. A. P. Hutton has begun work on a two-story concrete business block.

School—Chileo. Architect H. M. Keeny of Spokane has prepared plans for a $5000 school building.

Business Block—Pocatello. Architect W. A. Samms is preparing the plans for a five-story brick business block for Mrs. Dr. Bean.

Theater—Orofino. Theo. Fohl will erect a one-story brick theater building 24x80.

Car Shops—Pocatello. The Oregon Short Line is having plans prepared by its engineers for car shops to be built this summer at a cost of $100,000.

BRITISH COLUMBIA.

Rooming House—Vancouver. Architect J. G. Price prepared the plans for an eight-story Chinese rooming house for Wing Sang. Will be constructed of granite and red pressed brick and have 84 rooms.

Apartment House—Vancouver. David Roberts announces that he will build a modern four-story brick apartment house 50x120 at a cost of $65,000.

Apartment House—Vancouver. Architect Wm. F. Gardiner prepared plans for a four-story fireproof apartment house for Barrett & Deane.

Seamens Home—Vancouver. Architects Helyer & Archer are preparing plans for the Robert Scott Memorial Seamens Home. Will be seven stories, of reinforced concrete and brick, and cost $100,000.

Department Store—Vancouver. Architect G. A. Weynon of New York is preparing plans for the Woodward department store. The building will be 132x152 in size and ten stories high.

High School—Eburne. Architect Claude P. Jones of Vancouver has been selected to prepare plans for a high school.

Addition to Parliament Building—Victoria. Architect F. N. Rattenburry has completed plans for a four-story concrete and stone addition to the Parliament building.

Office Building—Vancouver. Architect A. A. Cox is preparing preliminary plans for a ten-story reinforced concrete building 120x120 for Weller Bros., Ltd., to cost $250,000.

Warehouse—Vancouver. Plans were prepared by Architect H. S. Griffith for a six story reinforced concrete warehouse and office building to be erected by the National Drug Company at a cost of $150,000.

Provincial Building—Prince Rupert. A. A. Cox, Vancouver, has been commissioned by the provincial government to prepare plans for the provincial building to cost half a million.

Bachelors' Club—Vancouver. Architects Stuart & White prepared plans for a three-story $20,000 club building for W. Able.

Old Peoples' Home—Vancouver. Architect R. T. Perry will prepare plans for a $50,000 fireproof building to be erected by the city.

Rooming House—Vancouver. Architect F. W. Macey prepared plans for a three-story brick addition to the F. T. Andrews' rooming house.

Chinese Building—New Westminster. Architect J. F. Watson is preparing plans for a three story brick building for Lee Din, to cost $50,000; a four story brick for Law A. Soong and Lee Ching, to cost $50,000, also a three-story frame apartment house for Law A. Soong, to cost $20,000.

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THE Architectural League of the Pacific Coast and the Portland Architectural Club will hold its Third Exhibition in Portland, June 2nd to 14th, 1913.

The Exhibition will be of the same scope and size as the last Exhibition held in Portland in 1910. Drawings and exhibits will be accepted from all coast cities and as far east as possible.

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IN JUNE the Architectural League of the Pacific Coast will hold its annual session in Portland. Complete exhibits in detail will require considerable space. Why not have photographic reproductions made of your plans and exhibits? This will add greatly to your space allowance and permit greater latitude as to details. The Angelus Commercial Studio invites the League to avail themselves of the services of this studio assuring the members that any commission intrusted to us will receive the attention this important occasion requires.

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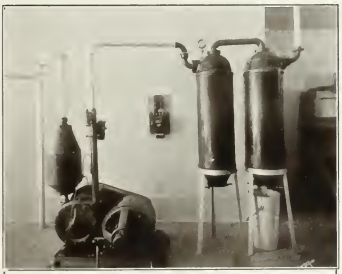

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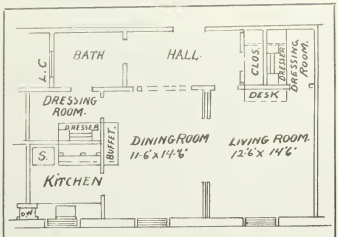

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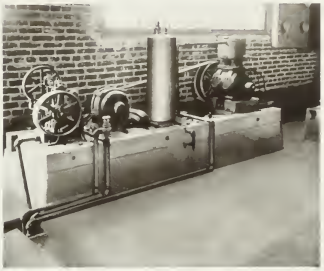

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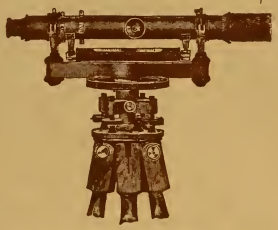

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THE Architectural League of the Pacific Coast and the Portland Architectural Club will hold its Third Exhibition in Portland, June 2nd to 14th, 1913.

The Exhibition will be of the same scope and size as the last Exhibition held in Portland in 1910. Drawings and exhibits will be accepted from all coast cities and as far east as possible.

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Architectural EXHIBIT Notice

IN JUNE the Architectural League of the Pacific Coast will hold its annual session in Portland. Complete exhibits in detail will require considerable space. Why not have photographic reproductions made of your plans and exhibits? This will add greatly to your space allowance and permit greater latitude as to details. The Angelus Commercial Studio invites the League to avail themselves of the services of this studio assuring the members that any commission intrusted to us will receive the attention this important occasion requires.

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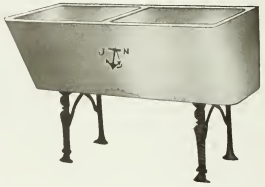

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The Pacific Coast Architect

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ADVERTISING RATES ON APPLICATION TELEPHONE MARSHALL 236

Current Comment

The building record of all Pacific Coast cities is most encouraging.

The paving district yearly grows greater. Coast cities cannot cease their growth.

April's lumber shipments, export and coastwise, out of Portland smashed all previous records.

If not impertinent to inquire, the public would like to know when construction on the new auditorium is to begin.

If clean cinders be used in concrete as it is made it will have a surface that will hold a nail almost as solidly as wood.

In Belgium a unique use is put to concrete in gardens. The concrete is formed into artificial mushrooms and used for garden seats.

A composition of sawdust and magnesium chloride makes a satisfactory artificial wood, adaptable to flooring and general interior woodwork.

A Texas contractor has built a knock-down concrete bungalow, each piece of which is tongued and grooved so that all may be easily put together.

If Portland expects to "get into the game" it is high time actual construction work should begin on the new public dock system. The start is to be made in June.

There is a five-story office building at Galveston, Texas, constructed of unique material. This is a composition of one part cement, two parts sand and four parts oyster shell

Poles of hollow reinforced concrete, weighing 1,600 pounds, 45 feet in length, are employed in Oklahoma City by the electric power company. By their use overhead wires are readily connected with the underground system.

To repair cracks in the stone foundations of St. Paul's Cathedral, London, liquefied cement is "shot" through a hose and nozzle by compressed air. The cement is forced into the cracks and in hardening binds the fragments together, thus "healing" the stone.

Fourth International Congress on School Hygiene

August 25-30, 1913, the Fourth International Congress on School Hygiene will be held at Buffalo, N. Y. It will be under the patronage of President Woodrow Wilson. There will be scientific exhibits on the subject and commercial exhibits of educational value. The importance of this gathering cannot be overestimated. As advance information truly says: "The man of tomorrow depends upon the child of today, and the child of today, roughly speaking, spends half his waking hours under the influence of school conditions."

Receives Beautiful Lamp

The Portland Architectural Club is the recipient of an especially beautiful library lamp which will shed its cheerful rays about club headquarters. It is of bronze, artistic in design, and is surmounted with a shade of art glass covering the quadruple cluster of incandescent globes below. The base of the lamp bears a silver plate upon which is inscribed the legend:

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This handsome lamp was made by the Spokane institution and is deeply appreciated by the members of the Portland Architectural Club.

Washington State Chapter, A. I. A.

THE regular meeting of the Washington State Chapter, A. I. A., was held at the College Club, Wednesday evening, April 2, with fifteen members present, President Willcox presiding. It was an unusual pleasure to have a Spokane member in attendance in the person of Mr. Held, and the presence of Mr. Boone, the oldest member of the Chapter, was greatly appreciated.

Owing to the pressure of business, it was much to be regretted that the special feature of the evening, "Reminiscences," was obliged to be deferred until another meeting, when many interesting bits of architectural anecdote and history are expected to be forthcoming.

It was decided to be impossible to accept the invitation of the National Conference on City Planning to send a delegate to the annual meeting in Chicago during the month of May, owing to the distance of the conference from this city.

A letter from Glenn Brown, secretary of the Institute, was read acknowledging the admission of Messrs. James C. Teague, D. R. Huntington and Albert Held to membership in the Institute.

The application of Mr. Bohne for membership in the Chapter was received. Mr. Bohne having left the Louisville Chapter in good standing, and being already a member of the Institute, was admitted to membership in the Chapter by a unanimous vote.

The Legislative Committee, through its chairman, Mr. Everett, reported that the bill creating the office of State Architect had failed to pass the legislature, and his committee had not found it necessary to act. Mr. Blackwell reported an interview with the Governor in which he had urged upon the Governor the view of the Chapter, that the duties of a state architect, should one be appointed, should be to take charge of the alterations and additions to existing institutions and buildings belonging to the state, but that large and monumental buildings should be left to competition among architects of the state.

Upon the report of Mr. C. F. Gould, chairman of the Exhibition Committee, it was decided to procure if possible a portion of the coming San Francisco Exhibition in connection with the Portland Chapter for exhibition in Seattle. It was the sense of the meeting that not sufficient new material was available for a local spring exhibition, but members were urged to prepare drawings for use later in the year. It was also decided to investigate the possibility of procuring the exhibit sent out by the Town Planning Conference of London.

Mr. Willcox called attention to the new journal of the Institute and urged the members to subscribe, and several members expressed themselves favorably in its behalf.

The first report of the Public Information Committee was read, being a digest of national and local news of importance, the latter the result of an experimental subscription to a press clipping bureau covering the Pacific Northwest. This feature of the Chapter meetings is likely to become permanent, if the reports prove sufficiently interesting.

Mr. Myers, chairman Architectural League of Pacific Coast Committee, reported the Annual Meeting of the League in Portland in June and urged as many members as could to attend.

Mr. Cote, chairman of Committee on Charges, presented the report of his committee for action, which was taken up section by section and discussed at length. Final action was postponed until a later meeting.

Meeting adjourned at 10:30 P. M.

San Francisco's $15,000,000 Civic Center

Work is forging ahead in the gigantic undertaking of San Francisco's Civic Center. Early in April the improvement was begun, when Mayor Rolph, in the time-honored way, and in the presence of several thousand citizens, turned the first spadeful of earth that marks the excavation for the new City Hall. The Civic Center entails expenditure of approximately $15,000,000 and the giving to San Francisco of a group of monumental buildings second to none in the world.

The City Hall is to cost $3,000,000 and is to be the first of a series of buildings that marks an epoch in the history of a greater San Francisco.

Following close upon the City Hall will come the $1,000,000 Auditorium, the contract for the excavation of which is to be let within two weeks. In addition to these buildings, are to come the $1,000,000 opera house, the plans for which are complete; the new $1,000,000 library and a $1,000,000 state building, the funds for which have just been voted by the legislature.

From now on work is to be rushed as far as possible in the hope that a large part of the Civic Center will be a reality before the Exposition in 1915.

In his speech, Mayor Rolph said that it had taken 28 years to build the former City Hall, and that, while it had been planned at a cost of $1,500,000, it cost $5,700,000. Both the delay and the extra expense, he declared, would not be tolerated in the building of the present structure.

In reciting the history of the Civic Center, the Mayor said that the site of the old City Hall was formerly Yerba Buena Cemetery. It was presented to the city by the state, which held title to the land. The property was auctioned off in old Platt's Hall and brought $950,000. Upon this land, after the cemetery had been removed, was built the City Hall, and that land will now form the plaza for the Civic Center.

Apropos of the moving of the Civic Center there is an interesting story that has to do with the moving of the High School of Commerce building from the Civic Center site. It is something of an undertaking, since it is a brick structure, and the largest area space ever moved in this fashion. It will cost $151,000 to get the building to a new site.

At present the building stands upon a temporary foundation of massive beams, and the 400 jack screws, each capable of lifting 50 tons, are being set in place. Within 30 days the moving operation will begin, and it is estimated that two months will be consumed in the journey of two blocks.

To move this large building intact from its present location at Larkin and Grove streets will be a feat of engineering unprecedented. The building weighs 8000 tons and covers a space 120 by 140 feet in area. The slightest miscalculation of strain in lifting the structure and placing it upon the steel rollers along which it will be pulled by three engines probably would result in serious, if not irreparable damage to the schoolhouse.

Among the materials to be used will be 2,000 steel rollers, each two feet in length, 20,000 oak wedges, 100,000 cedar wedges, 1,000,000 feet of lumber, 150 tons of steel and five miles of steel cable. Although the cost of moving will be $151,000, it would cost $300,000 to construct a new building. In case of accident the engineering firm that received the contract is pledged to build a new school.

British Columbia's Forestry Building

Plans were recently filed at Vancouver, B. C., by the Vancouver Exhibition Association with the Civic Building Department for a most unique structure. It is proposed to erect a Forestry building, into which only timber grown in British Columbia will enter as material, in Hastings Park. In design it will be rustic; huge logs, four feet in diameter, will serve as pillars. The gallery and second floor will also be supported by logs, 14 inches in diameter. It will be a valuable object lesson.

Portland afforded the first example of the kind in its Forestry building erected at the time of the Lewis and Clarke Exposition, and Seattle followed suit with a similar structure at the A. Y. P. Exposition.

State Bureau of Mines and Geology

The recent legislature of Oregon authorized the establishment of a state bureau of mines and geology. The Pacific Coast Architect approves of the measure and of the practical men appointed to look after the several departments of the work. It is especially interested in that department devoted to the development of those crude materials found in great quantities all over Oregon which enter so largely into the construction of buildings. T. S. Mann, president of the Oregon Manufacturers Association and manager of the Pacific Stoneware Company, of Portland, is in charge of the department of ceramics. It is an encouraging sign to note that immediate attention will be given to this department. Mr. Mann states that nearly all the building material now used in Portland and other parts of the state can be produced in Oregon. Cement, brick, terra cotta, etc., can readily be manufactured here from native deposits. He says that it is a great economic waste to ship Oregon clay elsewhere to be manufactured into terra cotta and then shipped back to the state. There are undoubtedly great opportunities still awaiting enterprising men in the matter of local manufacture of brick, tile, terra cotta and other things of which clay is the basis. Then again unlimited possibilities lie along the line of building stone, of which a great variety exists in Oregon.

Along these same lines we would like to see the clay and stone interests of all the Pacific Coast states similarly developed. In Washington this development has been much greater than in Oregon, and the products are widely known for their excellence.

New York's $10,000,000 Court House

A most remarkable structure will be the new court house to be erected in New York at a cost of $10,000,000. The plans were prepared by Guy Lowell, a young architect, who will be paid $600,000 for his design. The structure in reality comprises two separate circular buildings, one to be placed within the other. The outer building is modeled along the lines of the Coliseum at Rome, with a diameter of 500 feet and a height of five stories, equal to 200 feet. The inner building will be 275 feet in diameter and be eight stories high. This palatial temple of justice will occupy four city blocks and will doubtless be the most impressive building of its kind in America.

Simplicity the True Note

"I would rather have my home comfortable and convenient inside than beautiful outside." That sentiment, expressed with a thousand variations, implies more eloquently than argument the gap which too often exists in this country between beauty and utility, particularly in domestic architecture. The gap is unfortunate and it is unnecessary.

It is a far cry from the cottage to the college dormitory or from the city house, built upon a narrow lot and walled against other houses on either side, to the manor house on its broad acres. Yet no matter what the site or class of dwelling the attempt should be made to embody that spirit of domesticity without which the mansion is magnificently mournful and the cottage like anything but a home. This attempt is surely the duty of all those who are striving to raise the standard of our native domestic architecture, of all who would prove that the sacrifice of exterior attractiveness and fitness to interior convenience is quite needless and unwarranted, writes H. T. Lindeberg in "House Beautiful." It is an axiom of architecture that a building should rationally express the purpose for which it was designed, that a church should not look like a theater nor a library like a railroad station. The well-designed house should be significant of, and adapted to the habits and life of its occupants and should obviously express a purpose.

The design of a proper dwelling is based upon structural integrity and honesty of expression; on right proportion and simplicity of outline. It follows no whimsical fashion; it apes no popular style. It is neither fantastic in outline nor frivolous in detail. It pretends to be nothing but what it is, and it therefore contains no qualities which detract from simple dignity.

Build simply, whether a cottage or a castle. That is one of the fundamental laws of domestic architecture. This law applies especially to the architecture of country houses. A large living room is obviously more acceptable to the average family than the same space cut up into a "parlor" and "reception room," and a porte cochere is generally demanded for its name rather than necessity. To avoid pretence, to ignore shams, to prune and cut the superfluous, these are the rules to follow in designing houses of real character.

Building Situation

The review of building conditions on the Pacific Coast reveals some very interesting figures. The totals for the first three months show:

Portland, $2,703,315; Seattle, $2,798,185; Spokane, $232,713; Tacoma, $399,851; Vancouver, B. C., $1,076,363.

The March figures were: Los Angeles, $3,031,215, increase 79.8 per cent; San Francisco, $1,599,967, decrease 38.3 per cent; Boise, Idaho, $70,580, increase 30.7 per cent, Oakland, Cal., $913,027, increase 20.8 per cent; Pasadena, Cal., $175,622, increase 4.7 per cent; Portland, $886,760, decrease 50.2 per cent; San Diego, Cal., $492,041, decrease 8.3 per cent; San Jose, Cal., $63,132, increase 11.8 per cent; Seattle, $768,850, decrease 9.1 per cent; Spokane, $159,520, decrease 37.1 per cent; Stockton, Cal., $83,130, increase 29.2 per cent; Tacoma, $123,123, decrease 15.3 per cent.

The totals for the first quarter of a number of smaller cities and towns show the following:

Edmonton, Alberta, $1,238,928; Eugene, Ore., $127,914; Olympia, Wash., $17,610; Salem, Ore., $88,475; Victoria, B. C., $1,310,005. At New Westminster, B. C., the March figures were $79,180.

Portland Parks, Present and Prospective

Where Portland has but 653 acres of park properties, Spokane has 950 acres, Seattle 1,000 acres and Los Angeles 3,892 acres. The proportion, per capita, gives Portland one acre for every 400 persons, Spokane 110 to the acre and Seattle 223 to the acre. There are 26 parks in Portland, Washington Park of 193 acres being the largest. Should the proposed measure for the issuance of $2,000,000 in park bonds carry at the June election, a portion of the amount will be applied to the purchase of 630 acres additional of park lands. It is proposed to expend $1,577,000 in all for the purpose, while $423,000 is to be set aside for park buildings and improvements. Then Portland will stand ahead of any other Northwestern city in park acreage. Among the tracts it is proposed to purchase are the following: One tract containing an aggregate of 200 acres and costing $845,000; six tracts of land south of East Stark street containing 325 acres for $624,000; 90 acres for Parkway extension, costing $70,000, and 14 acres for extensions on existing properties at a cost of $38,000.

Portland's parks at present comprise: Macleay, 130 acres; Washington, 193 acres; Governor's Park, 6 acres; North Parkway, 2½ acres; South Parkway, 5 acres; Chapman and Lownsdale, 1.8 acres; Terwilliger Park, 5 acres; Terwilliger Parkway, 75 acres; Fulton Park, 30 acres; Sellwood Park, 15 acres; Kenilworth Park, 9 acres; Brooklyn playground, 1 acre; Ladd Circles, 1 acre; Maple Square, .42 acre; Cypress Square, .42 acre; Orange Square, .42 acre, and Mulberry Square, .42 acre; Mount Tabor Park, 176 acres; Laurelhurst Park, 30 acres; Holladay Park, 5 acres; Lincoln Park, 2 acres; Peninsula Park, 17 acres; Patton Avenue Square, 1.3 acres; Gaumais Square, 1.65 acres, and Columbia Park, 30 acres.

During 1912 a number of improvements were made in the various parks, but none of these was extensive. Wired glass replaced the temporary skylight in the Forestry building, and an attempt to adjust the street boundary lines of the grounds resulted in a failure. Very little was done on Macleay Park, but one of the great needs is the acquisition of more land to permit of convenient access to the park up the gulch. In Washington Park various walks were widened for convenience, and the drives treated to a surface application of heavy asphaltic base, California oil, and minor repairs made. Among the needs of this property are wider drives, connection with street system west of the park, extension of the drive to the south boundary, and thence by a southerly route connecting with the proposed parkway extension, more modern comfort facilities, better lighting, more refectory facilities and extension and grading of the children's playgrounds south and west.

In North Parkway two blocks were inclosed by a substantial iron picket fence, all trees were pruned and plans for fitting up the northernmost block for tennis courts were made. At South Parkway a new bandstand was constructed between Jefferson and Columbia streets. The drives in Terwilliger Parkway were shaped up and given an application of crude oil, and several studies of a plan for the Marquam Gulch playground have been submitted.

At Kenilworth Park the southern half of the upper area was brought to finished grade and seeded, walks were subgraded and plantations installed on the southern and western borders. A comfort station serving both levels was built. There is yet much work to do in grading, fencing, lighting and construction of walks, fountains and wading pools. Children's apparatus and shelter also are necessary.

Concrete walks are necessary to bring Ladd Circle to a state of completion. It is also proposed that a system of ornamental lighting be established in the park. In Holladay Park a bandstand of more spacious proportions and better design was constructed to replace the older one, which had become dilapidated and in need of repairs. In Lincoln Park iron fencing has been erected, play apparatus put in place and the borders planted with trees and shrubs.

The improvement in none of the parks amounted to much in a large way, for lack of funds to carry out the work.

* * *

Nero Set Pace for Modern City Planning

Every youngster knows that Nero fiddled while Rome burned, and the old-time Emperor has gone down into history as a soulless reprobate who was not in good repute with the insurance companies. And now comes a man who has discovered an author person, yclept Tacitus, who rushes to the rescue of Nero and wants to prove an alibi.

For it is declared by Mr. Tacitus that Nero was really opposed to fires and did a lot to prevent them. The fiddle episode, however, is not explained, and it is presumed that when the fire actually got started he concluded that he might as well get a little fun out of it anyway, being not particularly concerned about other persons' troubles.

Anyway Nero, according to Tacitus, restricted the height of buildings and did other things along the line of city planning according to modern ideas, showing that he wasn't such a back number after all. Here is what Tacitus in his "Annals" says about Nero, who flourished from A. D. 54 to 68:

"So much of Rome as was left unoccupied by his mansion was built up, not as it had been after its burning by the Gauls, without any regularity or in any fashion, but with rows of streets according to measurement, with broad thoroughfares, with a restriction on the height of houses, with open spaces and the further addition of colonnades as a protection to the frontage of the blocks of tenements. These colonnades Nero promised to erect at his own expense and to hand over the open spaces, when cleared of debris, to the landlords.

"The buildings themselves, to a certain height, were to be constructed solidly—and without wooden beams—of stone from Gabili or Alba, as that material is impervious to fire. And to provide that the water, which individuals had illegally used, might flow in greater abundance in several places for the public use, officers were appointed and every one was to have in the open court the means of stopping a fire. Every building, too, was to be enclosed by its own wall, not by one common to others. These changes, which were liked for their usefulness, added beauty as well to the new city. Some thought, however, that the old arrangement had been more conducive to health, as the narrow streets with the high roofs were not so penetrated with the sun's heat, whereas now the open space, unsheltered by any shade, is scorched with a fiercer glow."

And again, Aurelius Victor in his "Roman Emperors," speaking of Trajan, says: "In his reign of Tiber, overflowing its banks with far greater injury than had been the case under Nerva, destroyed many houses along the shores, and there were terrible earthquakes in many provinces, a fearful plague and a famine. All these misfortunes Trajan promptly relieved and he passed a law which limited the height of houses to 60 feet, that they might be in less danger of falling and that in case they should fall, they might be repaired at less expense. For all these benefits he received the name 'Father of His Country.'"

Thoughts on Fire Waste

At the recent meeting of the National Brick Manufacturers Association held at Chicago, Ernest Palmer, of the latter city, delivered an illuminating address on "Our National Fire Waste; Its Cause and Remedy." From this address, published in *The Clay Worker,* we make the following excerpts:

Let us compare Berlin, which is the same character of city with about the same population and area, with Chicago. The cost of maintaining the Berlin fire department is about $300,000 annually—of Chicago about $3,000,000.

The fire loss for the United States and Canada as reported by the *Journal of Commerce* for the year 1912 amounts to $225,320,900. We destroy more by fire than does all of Europe. Our fire loss pro rata is from six to twenty times that of any other nation. The actual combustion we indulge in is equivalent to a tax of almost $3 per capita every year. In Italy it is 12 cents, in Germany 49 cents and in all Europe the average is less than 33 cents.

In 252 American cities the average is over $3. In New York there are 12,000 fires each year, and in London, which is over twice as large, there are fewer than 4000.

Why, in this country a city of half a million people feels in luck to wind up a year with less than $5,000,000 fire loss. A city of the same size in Europe feels that it has been stricken for its sins if its fires aggregate more than $50,000 a year.

In the group of eleven cities having a population of 400,000 or over, St. Louis had the largest per capita loss, with Boston second, while Chicago was third with a loss of $2.59 per capita. Baltimore, which received a salutary warning from its conflagration in 1904, made the best showing of the cities in this group, with Cleveland next. The average per capita loss of this group of the eleven larger cities is $2.27, which is 13 cents higher than in 1910. (These figures were compiled in 1911.)

The average daily loss throughout the whole country is more than one-half million dollars. We have something like fifteen million buildings in this country, and we clap our wings and crow vociferously about the vast amount of building that we do and our great building booms, and imagine that we are adding wonderfully to our real property.

The fact of the matter is that we have to. If we didn't have a building boom every so often we would soon be living in caves and forests. We burn down now about one-third as much as we build anew each year.

Every week in the year we burn up three public halls, twelve churches, ten schools, two hospitals, two asylums—don't try to remember all of these or you may be in the next one that burns—two colleges, six apartment houses, twenty-six hotels, three department stores, two jails—which could perhaps be filled with incendiaries if all states had good fire marshal laws—110 flat buildings and about 1600 homes.

The excessive difference between the fire waste of Europe and that of the United States is caused by:

First, the difference in the point of view and responsibility of the inhabitants of Europe and those of the United States.

Second, the difference in the regulations governing hazards and hazardous materials and conditions, and in the enforcement of such regulations.

Third, the difference in the construction of buildings.

The third cause of the contrast between Europe and the United States is the difference in the construction of buildings.

If any of you want a task of some difficulty suppose you try to codify the jumble of insufficient and inefficient state and municipal laws respecting the construction of buildings.

We have every variety somewhere in the country, and in many places you will find the typical American condition of careless indifference and inefficient enforcement of even such laws as they have.

Provision for fire control could be and should be incorporated in all building construction. There is no question but that the technical information and experience of this nation is ample to guide the public in reducing the fire danger if they would only understand and use it. We must create a public disposition to study and to get enacted and enforced a rounded program of uniform legislation on this subject.

There are two reasons for constructing non-combustible buildings. One is that they are less apt to burn, and the other is that they are less apt to set fire to their neighbors. Twenty-seven per cent of our fire loss is due to fires spreading beyond the walls in which they started.

In the City of Vienna, Austria, it is said that in two hundred years a fire has not burned beyond the building in which it originated. Can you imagine that possibility in any American city? If it were true Mrs. O'Leary's cow would have something to kick about.

We Americans get a good deal of comfort out of the phrase, "The fire was confined to the building in which it started." That condition should be the rule and not the exception.

It has been said that in America only one building out of every thousand is even moderately fire resisting. This condition exists in a land where fireproof construction has attained the highest perfection.

If any of our large cities had spent one-half of what their fire departments have cost them in the way of better construction of their buildings the greater part of those cities today would be indestructible.

Our public, however, has too long been accustomed to wood and to fire. In pioneer times—and even yet in some parts of this country—there was some sense in using wood. It was the only thing available, but today its use in our cities assumes the role of a bad national habit, and, like all habits, it is hard to overcome. As a matter of fact, wood is now one of the highest priced building materials.

People are gradually being taught that metal and stones and brick and cement and marble and plaster can be made into just as beautiful forms as can wood. They must also be taught that among these incombustible materials to which we referred distinctions are inevitable.

Of course the ideal material for resistance to fire is burnt clay. Brick walls and terra cotta trimmings best stand the test and are the least damaged in conflagration or ordinary fire.

The modern steel frame building to many present day Americans represents the very epitome of endurance and resistance to time and the elements, but every particle of that steel must be thoroughly and well protected against fire, and there again burnt clay is the most dependable medium. Brick or hollow fireproofing best serve that purpose.

It is easy enough for us to say these things, and it is easy enough for us to understand them and to know that they are true, but it is a difficult matter to get the idea of fireproof construction abroad in the land so thoroughly that the people will demand it of their neighbors.

The city councils throughout the country approach the subject of building ordinances either with indifference or

with fear and trembling, and when they do get an ordinance it is very seldom that public opinion will sustain it thoroughly.

We all delight in the word "fireproof," and we use it glibly. You never heard of a hotel that was not advertised as fireproof, or a storage warehouse or any other building which caters to the general public. But the word fireproof in those cases means only so much as its author at that time wants it to mean.

The International Association of Building Commissioners suggested that all buildings be labeled by the municipality as being fireproof, non-combustible, ordinary or dangerous.

We have a national pure food law which requires a man to tell the truth about his product, that is, to tell what is in the product. We have not progressed far enough to make him tell the truth about the product. He may still say that it is an "absolute, sure cure for consumption," etc., but he must tell what it is. Perhaps the citizens of our country need a Dr. Wiley to prescribe building regulations and a labeling system. (Applause.)

Panama-Pacific Exposition

The Panama-Pacific Exposition management at San Francisco is rapidly pushing the construction work of that gigantic undertaking. Already the magic city is taking shape, and on the official date of its opening, February 20, 1915, the world, admitted through its gates, will see a finished project. The great exposition will be totally unlike anything of the kind heretofore attempted. It will be like unto itself alone—*sui generis*. It is peculiarly the California spirit everywhere prevalent that makes possible the announcement that the "plans are all completed and in the hands of builders and work advanced more than at any other exposition at the same stage of progress." The dominant note when the great exhibition is in full swing will be the educational displays of American school children's work. The sculpture and decorations and the landscape effects will add wonderfully to the event.

By far and large the statuary that will adorn the grounds is bound to make lofty impressions. A. Stirling Calder is acting chief of the department of sculpture.

A great equestrian fountain will symbolize the creation of the isthmian waterway. The group will typify "Energy, the Lord of the Isthmian Way." The crowning sculptural features in the Court of the Sun and Stars will be the groups "Nations of the East" and "Nations of the West." In this court will be placed the fountains of the rising and setting sun. Then there will also be two vertical groups representing "Order and Chaos" and "Eternity and Change." Another striking piece will be a vast figured column, the "Column of Progress."

In front of the Fine Arts Building a colossal reclining figure will represent "Ancient Civilization," while a group will typify "Modern Civilization." The tower gate will be flanked by two mural fountains, "Eldorado" and the "Fountain of Youth."

In the Court of the Seasons will appear a group, "Nature," "Ceres" and the "Four Seasons." "Fire and Water" will also be represented. In the Court of the Flowers will be a fountain featured from the "Arabian Nights." "Beauty and the Beast" will be shown in the Court of the Palms. At the gateways of Columbus and Balboa four equestrian statues will be erected. An equestrian statue of the American Indian, one of the pioneer and one of Pizarro will be striking in appearance.

Architects Hold Annual Election

Friday evening, May 2, the Portland Architectural Club held its annual banquet and election of officers at the Tyrolean room of the Hotel Oregon. This was undoubtedly the most interesting and enjoyable meeting the club has ever held. There were present sixty architects.

The Architectural Glee Club, Mr. Fred Bauer and an entertainer from the Oregon Grill furnished music throughout the evening. There were also numerous interesting and witty talks from various prominent men.

After the dinner the election of officers was held. The president, treasurer and secretary were unanimously re-elected. C. C. Rich was elected vice-president. The officers of the club are: President, Frank Logan; vice-president, C. C. Rich; secretary, Russell E. Collins; treasurer, H. G. Beckwith.

Mr. Lawrence announced the program for the Architectural League of the Pacific Coast convention, which will be held here this June. The plans for the league exhibition, which is to be held in conjunction with the exhibition of the Portland Architectural Club at the same time as the convention, were also discussed.

The members of the Portland Architectural Club Atelier had a debate as to whether the entrance to the new post-office should be on the Park blocks or on Broadway.

The management threw the hotel open for the inspection of the architects.

Secretary Danforth Resigns

At the annual meeting of the Builders Exchange, Portland, held on the evening of May 7th, L. F. Danforth, the secretary, tendered his resignation. The reason assigned was his desire to engage in the contracting business. His successor is yet to be selected.

The following officers were elected: J. S. Seed, general contractor, president; A. W. Kutsche, general contractor, vice-president; F. L. Le Doux, treasurer, and L. F. Danforth, the present secretary, was re-elected, although he has tendered his resignation.

The directors are: A. W. Kutsche, general contractor; Oscar Wayman, mason contractor; J. S. Seed, general contractor; W. C. Arthur, general contractor; T. J. Wilson, painting contractor; J. Trenchall, general contractor; Robert Bullock, painting contractor; F. X. Le Doux, general contractor; E. J. Findley, general contractor; J. C. Bayer, sheet metal contractor, and Al Bingham, general contractor.

New Cement Plant

It is reported that the Portland-Beaver Cement Company has let the contract to the Leigh Hunt Engineering Company of Kansas City for the immediate construction at Gold Hill, Ore., of a cement plant. Motive energy will be supplied from a great hydro-electric power plant. The initial capacity will be 1,000 barrels a day. The enterprise is capitalized for $600,000, of which $500,000 will be expended on the plant and equipment and $100,000 placed in the operating fund. All the officers of the new company are practical cement men. The president resigned from a position with the Iowa Portland Cement Company to align himself with the new company. The officers are:

J. C. Burch, president; William Schrump, vice-president; C. S. Woody, secretary-treasurer, with Burch, Schrump, Woody, L. H. Adams and John Gochorn members of the board of directors.

The House of the Common Man

By Percy P. Adams.

[Professor Adams is a member of the Civil Engineering faculty of the University of Oregon, which is his Alma Mater and whose degrees he has earned in both the colleges of Liberal Arts and of Science. He is in charge of the University's work in Architecture.]

Architecture is properly a fine art; in fact it is considered by many to be the finest of fine arts. It calls to its service the sculptor, the painter and the composer, not of harmony of sound, but of that more subtle composition—the harmony of line and mass that must be present in any architectural production if it is to endure and afford pleasure.

This conception of architecture is too frequently considered applicable only when the productions are of a costly or monumental character. This is undoubtedly a mistaken idea for a highly civilized people to entertain. The growth of civilization toward the true ideals depends, more than most people realize, upon the widest possible dissemination of the appreciation, if not the gifts, of the so-called fine arts—those arts that "have primarily to do with imagination and taste and that are applied to the production of what is beautiful," such as poetry, music, painting, sculpture and architecture. In America, as Irving has stated it, "literature and the elegant arts must grow side by side with the coarser plants of daily necessity," and these "coarse plants of daily necessity" have well nigh choked the more tender plants of the higher arts in many communities.

There are hopeful signs, however, that indicate a deepening appreciation of the value of these tender plants, and they are being cultivated and cared for in a way that has already brought rich rewards, not only to those who have been busy in the garden but also to the wayfarers who pass that way, and that promises for the future a harvest of enlightenment and joy of living that the workaday world has not often enjoyed.

In the realm of architecture these signs may be observed in a number of places. Most important of all perhaps is the development of the civic taste as manifested in the replanning of many towns and cities along aesthetic as well as utilitarian lines. Streets and public buildings, boulevards and residences are arranged so as to produce a proper effect of unity and corelation of parts.

The idea seems to be growing obsolete that public buildings should be portioned out to the different sections of a community simply to prevent one section from getting ahead of another in the matter of substantial improvements that will make an increase in the valuation of the neighboring real estate. Civic pride in a unified city is replacing the old sectional selfishness, and the importance of this change as a factor in the elevation of the tone and quality of the civilization of the communities affected can hardly be fully realized by the present generation.

But there is another phase of architectural activity that shows the trend towards better things, and that is the planning and decorating of the home. This is a matter that affects every one, and any one of us may have an opportunity to help in the work of raising the standards of living. But some will say there is nothing of the fine arts in such work because it is the daily necessities that control; for there must be a combination of rooms more or less rigidly adhered to, and the imagination and taste are sadly hampered. This, however, is a narrow view to take, for while we may not be financially able to require the services of the sculptor or the painter, we can secure harmony and beauty of line and composition without sacrificing the daily necessities of convenience and usefulness.

Too many homes are simply thrown together in a haphazard sort of way, whereas a certain amount of thoughtful consideration of the problems involved and intelligent advice would result in the erection of buildings which, however humble, might properly be classed as works of architectural merit. It is not always size, grandeur, costliness and the amount of decorative detail that are required by the architectural composer, for many humble homes are gems of real art in which the subtleties of line and color and artistic propriety produce an effect of pleasure and artistic satisfaction often lacking in more pretentious homes. In our busy, preoccupied lives we often fail to realize that importance of beautiful surroundings, and by beautiful we do not mean necessarily elegant or costly or highly decorated, but rather that appropriateness of each line and feature of the structure, whether of utilitarian or decorative intent. Whether the structure be a mansion, palace or humble cottage, the same beauty and harmony can prevail if the composer will make some conscious effort within himself, or through others, towards the accomplishment of such results, instead of being indifferently content with a haphazard composition in a minor key. Architecture has been well defined as "the attempt to harmonize in one structure the requirements of beauty and utility." It is only by such harmony and the proper subordination of one element to another that true homes can be attained, whether of high or low degree.

And every one of us may have a part in this work of creating beautiful homes if we but make the conscious effort, either as actual composers or at least as appreciators and encouragers of the efforts of others, thus lending our small assistance to the uplift and betterment of the civilization to which we belong.—University of Oregon *Extension Monitor.*

* * *

Luncheon Dates Changed

In accordance with a notification sent out by the committee on luncheons, comprising W. H. Graves, W. G. Holford and W. H. Crawford, the date of noonday meetings of the Oregon Technical Club has been changed to Mondays instead of Tuesdays. Under the new arrangement three meetings have been held—May 5, May 12 and May 19. At the first Jas. R. Thompson, of the Oregon Society of Engineers, presided as chairman, and Prof. F. L. Griffin, of Reed College, was speaker. At the second Robert G. Dieck was chairman and the speaker was Dr. C. S. White. H. A. Whitney was chairman at the third meeting and the speaker was Prof. Jas. B. Kerr. At the meeting to be held May 26 the speaker will be Prof. E. H. McCallister, of the University of Oregon, with H. S. Wells as chairman. The luncheons are given at the Commercial Club and are proving immensely popular.

* * *

Industrial Publications

Roofing Tin, the Taylor bulletin for the roofing trade, published monthly by the N. & G. Taylor Company, Philadelphia, is out for April. A thrilling detective tale, "The Adventure of the Copper Paint," by Sheerluck Holmes would warp a concrete block. It is well illustrated as usual.

"Forty-one 'Concrete' Reasons" is the title of a handsomely illustrated brochure issued by the Inland Portland Cement Company of Spokane, Wash. It is written by De Witt V. Moore, C. E., member of the American Society of Engineering Contractors. It contains a great deal of valuable information on the subject.

Architects to Give Exhibit

Arrangements have been made by the Vancouver Chapter of the British Columbia Society of Architects to hold an exhibition, beginning June 18, to continue for two weeks. The exhibit will consist of specimens of the architects' better class of work, executed in that section, plans, rendered drawings, photographs, foreign sketches and cartoons for art glass and mural work. There will also be shown a complete exhibit of photographs of buildings now under construction for the Panama-Pacific Exposition at San Francisco. The committee in charge comprises J. R. Putnam, W. T. Whiteway, T. Hooper, A. A. Cox and W. S. Painter.

Dahlstrom Appoints Sales Manager

At a recent meeting of the board of directors of the Dahlstrom Metallic Door Company, executive offices and factories at Jamestown, New York, Mr. James R. Kimball was appointed sales manager, with headquarters at Jamestown. Previous to his connection with the Dahlstrom organization, Mr. Kimball was associated with the Art Metal Construction Company, also at Jamestown, for more than thirteen years, during which time he respectively filled the positions of district sales manager and special bank salesman. Within the last few years Mr. Kimball designed and personally supervised the sales of practically all the large bank installations made by the latter named concern.

Fire Trap School Buildings

In a recent report the school buildings of many states, Oregon included, are severely condemned because many of them, even in the larger cities and towns, are not of fireproof construction. The report says that while these buildings do not bear the words "built to burn," they might as well do so, for they are largely of wood. It is a short-sighted policy which provides solid, fireproof penitentiaries, for example, to house convicts, who are the enemies of society, on the one hand, while on the other hand school houses where our children are being educated are veritable firetraps. It is right and proper that penitentiaries should be made entirely fireproof, of course, but it is even more highly important that school houses, too, should be fireproof. In the development of a new country wooden buildings of all kinds are erected because that generally is the material nearest at hand, and consequently the more economical. As communities expand and take on more solid conditions the nature of their buildings likewise change, giving way to structures of more permanent and more durable material. These cost far more of course, but their permanency and the reduced cost in insurance more than justify the added expense. All schools, all theaters, all churches, all manufacturing plants, all great department stores and hotels, in fact every kind of building where large numbers of human beings congregate should be of fireproof construction, for human life is the most precious asset of civilization.

Death Announcement

We are in receipt of an announcement of the death of Mr. Charles H. Parsons, first vice-president of the American Hardware Corporation, New Britain, Conn.

Architecture and School Hygiene

"The Relation of School Architecture to School Hygiene" will be one of the important topics on the program at the fourth International Congress on School Hygiene, which is to be held at Buffalo August 25th to 30th.

A special symposium is being arranged on the subject of school illumination by the Society of Illuminating Engineers. Dr. James Kerr, of London, England, for many years an active member in London Council and an international figure in affairs relating to school hygiene, will read a paper on "The Illumination of Class Rooms." "Recirculation and Ventilation" is the title of the paper to be given by Dr. Luther Gulick, of New York. Other papers on the subject of architecture will be read by Frank Irving Cooper, president of the Boston Society of Heating and Ventilating Engineers, who will speak on "The Planning of School Houses Against the Fire Hazard," and by Prof. Theodore Hough, of the University of Virginia, on "Some Aspects of the Problem of Ventilation."

Turkish Architecture

Speaking of the Turk, H. G. Dwight says, in the *Atlantic Monthly*, of Turkish architecture:

"But in architecture and certain forms of decoration he has created a school of his own. It is not only that the Turkish quarter of any Anatolian town is more picturesque than the others; the old palace of the sultans in Constantinople, certain old houses I have seen, the mosques, the theological schools, the tombs, the fountains, of the Turks, are an achievement which deserves a more serious study than has been given it. You may tell me that these things are not Turkish, because they were modeled after Byzantine originals or because Greeks and Persians had much to do with building them. But I shall answer that every architecture was derived from another, in days not so near our own, and that, after all, it was the Turk who created the opportunity for the foreign artist and ordered what he wanted."

Straw Waste as a Lumber Substitute

A substitute for wood made out of straw is attracting considerable attention in Europe, where the steadily increasing price of lumber makes the question one of no small importance, says the New Orleans *Picayune*. It is fashioned with a single piece of machinery by a process at once simple and inexpensive. The straw waste is first split longitudinally, according to a description given in the *Scientific American*, and this is done by a special cutting device to destroy the resiliency in the stalk. The ripped material is then placed in the machine, together with certain ingredients, being laid upon a traveling plate. The latter is kept at a certain uniform temperature by means of steam so as to cook the straw and substances associated therewith. When this stage has been carried to the requisite degree, intense pressure is applied, the results of which are to knit or compress the fibres of straw very closely and tightly together to form a homogeneous mass. A pressure of between two and three tons per square inch is required in order to produce the best results, and the fabric issues from the machine in continuous lengths of the required thickness and width, to be sawed as desired. In general appearance the material resembles whitewood. The first experiments were made five years ago.

Exterior, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Photo by [illegible], San Francisco

Entrance to Jinks Room, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Main Entrance, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Detail of Balcony, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Library, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Reading Room, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Lounge, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Gabriel Moulin, San Francisco

Entrance to Buffet, Bohemian Club
San Francisco, Cal.
Loring P. Rixford, Architect

Photo by Federal Months, San Francisco

Mantel, Library, Bohemian Club
San Francisco, Cal.
Loring P. Rhoads, Architect

Photo by Charles Weeks, San Francisco

Mantel, Dining Room, Bohemian Club
San Francisco, Cal.
Loring P. Rhoads, Architect

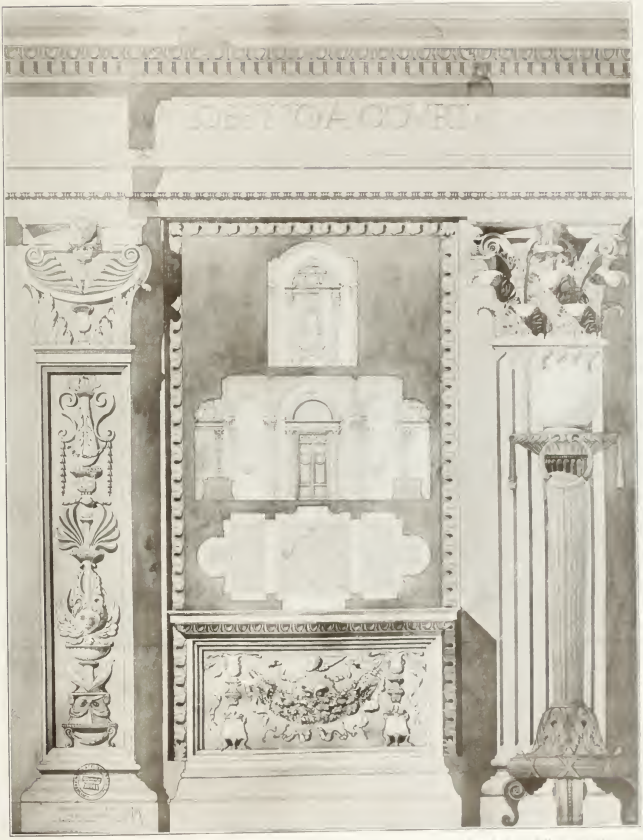


Photo by Colonel Mathews, San Francisco

Austin Wyhlidinger
San Francisco Architectural Club Archer
Chester Parsons

Arthur H. Mullgardt
San Francisco Architectural Club Atelier

Phot. by Gabriel Moulin, San Francisco

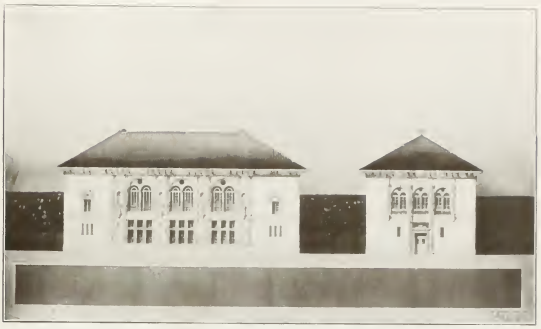


Photo by Gabriel Moulin, San Francisco

A Student Dining Hall
Russell L. Collins
Portland Architectural Club Atelier

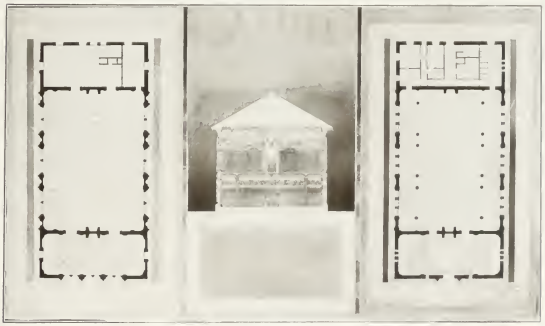
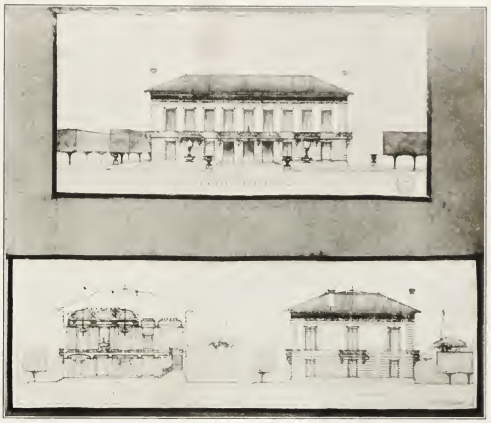
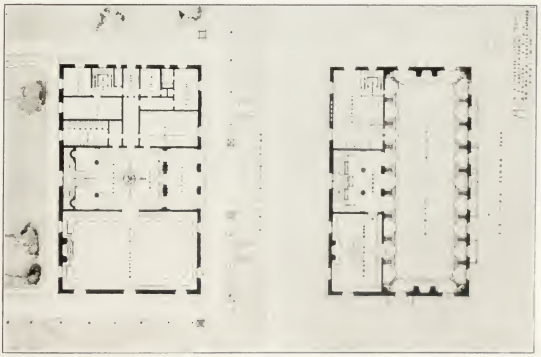


Photo by Gabriel Moulin, San Francisco

A Student Dining Hall
Russell L. Collins
Portland Architectural Club Atelier



A Student Dining Hall — Photo By Gabriel Moulin, San Francisco
Clarence A. Tantau
San Francisco Architectural Club Atelier
Brown & Bourgeois, Patrons



A Student Dining Hall — Photo By Gabriel Moulin, San Francisco
Clarence A. Tantau
San Francisco Architectural Club Atelier
Brown & Bourgeois, Patrons

Society of Beaux Arts Architects, San Francisco

LORING P. RIXFORD . . . President, Sharon Building.
JOHN BAKEWELL, JR. . . . Vice-President, Charleston Bldg.
WM. C. HAYS . . . . . Secretary, 86 Post Street.

SOCIETY OF BEAUX ARTS ARCHITECTS.

LORING P. RIXFORD, Chairman Committee on Education.

OFFICIAL NOTIFICATION TO S. B. A. A. STUDENTS OF AWARDS MADE IN THE JUDGMENT OF APRIL 26, 1913.

The committee in San Francisco received 39 Projets.

CLASS "B"—IV ANALYTIQUE (Order Problem).
"A VESTIBULE TO A COURT ROOM."

Author	Award	Atelier
Knudsen, A.	M.	Baur
Whittlesey, A. C.	M.	Baur
Leonhaeuser, Carlos	M.	Baur
Kruse, L.	M.	Brown & Bourgeois
Heggie, R. M.	M.	Allison Davis
Weston, Jos. F.	M.	Allison Davis
McLeod, Roy	M.	Allison Davis
Stanton, John	M.	Portland Architectural Club
Bartell, A. E.	M.	Portland Architectural Club
Dresser, S.	M.	Nicolais, R. A.

CLASS "B"—IV PROJET.
"A STUDENTS' DINING HALL."

Author	Award	Atelier
Reinecker, C.	M.	Baur
Schmidts, C. R.	M.	Baur
Wyckoff, R.	M.	Baur
Brown, Guy	M.	Brown & Bourgeois
Tantau, C. A.	M.	Brown & Bourgeois
De Long, Champs	M.	Schadler
Collins, R. E.	M.	Portland Architectural Club
Genther, F.	M.	Carsley

CLASS "A" AND "B" ARCHAEOLOGY—IV PROJET.
(Problem in Design.)

Author	Award	Atelier
Mellberg, A.	M.	Rixford

The members of the jury were: Messrs. Brown, Baur, Perry, Rixford, Bakewell, Hays, Bourgeois and Howard.

Students who competed in Paris Prize Competition, March 1, 1913:

Author	Atelier
Ed. T. Frick	Brown
Chandler I. Harrison	Brown
Ernest E. Weihe	Brown
Thos. E. Kent	Brown
Fred Kramer	Brown
Anthony Horstman	Brown
Lee Bryant	Brown
Carl L. Warnecke	Brown

Thos. E. Kent received a mention in same.

Houston, A City of Progressiveness

In 1912 the city of Houston, with a population of 80,000, decided to step into the forward rank of progressive municipalities. It appropriated $2700 to send a Mr. Putnam, an expert journalist of that city and a civic reformer, abroad. His mission was to acquire original information in the principal European cities, with a view of applying such knowledge to the betterment of Houston.

He visited Glasgow, Hamburg, Berlin, and various other cities, famed for model, progressive, and successful municipal government.

His conclusions are both general and detailed. He urges "more certain continuity of constructive municipal policies," with employment in all responsible positions of technically trained experts. City planning of needed expansion on a well considered basis, embracing extension of facilities for both transportation and city industries, is given a prominent place.

To provide funds for such development he conceives bold and broad financing of bond issues to be of the first importance. He considers necessary larger assessments for cost of improvements on owners of property which will be thereby increased in value. He finds that in Europe a large share of the necessary taxation is secured from incomes.

He believes that public utilities should be owned or controlled by the municipality.

Income so produced should be treated as a source of capital for non-revenue yielding improvements for the public good. Considerations of private profit must be subordinated to the general welfare.

Mr. Putnam advocates the raising of the status and increasing the pay of such officials as shall be employed to carry out these policies.

Commission government is no novelty in Texan cities. The first hand impressions of this last investigator will surely add converts to the plan of entrusting city government to a limited number of specially qualified and responsible men.

Last Word in Schools

A rather remarkable eight-story building has just been completed on Irving Place, New York, says *The Ohio Architect, Engineer and Builder*. It is a theater with a seating capacity of 1500. It has an apartment of seven rooms completely furnished for the special purpose of instruction in domestic science. There is a model institution for teaching banking. There is a factory divided into various rooms, where garments are made; a bookbinding plant and a miniature department store in which girls who aim at positions in the big stores can qualify themselves.

Growing plants make a garden out of the roof of this eight-story building, and on that roof, too, are basketball courts, a gymnasium and shower baths. There is a lunch room where 700 can be accommodated at once.

The question is whether this building is a fancy settlement workers' club or a building constructed by some philanthropist to carry on experiments. Nothing of the kind. It is a public school of the City of New York just opened at a cost of $250,000. There are 228 instructors, and it can take care of 5000 pupils. It is the last word in public school building construction.

It is only a few years since the average school building consisted of four walls, a few windows, a smoky furnace in the cellar and all under the domination of the political janitor, who was paid better than the principal.

BERGER BROS.' SALESROOM.

The new salesroom of Berger Brothers, Inc., 186 Broadway, illustrated at the head of this page, is not only attractively decorated, but so arranged that each customer can examine samples privately. This is accomplished, as will be seen by reference to the photograph, by means of curtains which divide the length of the salesroom into several compartments.

The walls are covered with a beautiful shade of nine-foot aerochrome paper, which was especially colored to match the frieze, which has also a special coloring. Separating the landscape frieze and the lower wall is a dentil cornice. The woodwork is in flat white and mahogany finish. The color scheme is not only attractive but individual.

The balcony, which may be seen at the rear of the store, serves the purpose of a demonstration room, where a number of complete room effects are displayed. These are changed from time to time. The effect is admirable, and this showroom is well suited to the display of exclusive wall papers and cretonnes carried by this firm.

Circassian Walnut Substitutes

One of the world's best known and expensive woods is Circassian walnut, and of it the United States is probably the largest consumer. The high cost of Circassian is due to the scarcity of the beautifully figured variety demanded for interior finish of houses and for furniture, for the tree itself is more widely distributed than almost any other of commercial importance, says the Department of Agriculture.

The demand for the best wood, however, has always outrun the supply. Even in the eighteenth century, when wars in Europe were frequent, so much Circassian walnut was used that there was a great scarcity of the material. This wood was used for gunstocks at that time Early in the nineteenth century the wood of 12,000 trees was used for this purpose alone. Single trees containing choice burls or fine birdseye figures have sold for more than $3000.

The tree is native to the eastern slopes of the Caucasus and ranges eastward to the foothills of the Himalaya Mountains, from which it extends southward to northern India and the mountains of upper Burma. It has been widely planted in Europe and the United States, in this country under the name of English walnut. The wood grown here, however, has not the qualities demanded by the cabinet and furniture maker. Much of the Circassian walnut now used comes from the Black Sea and other parts of Asia.

According to a circular just published by the forest service the demand for Circassian walnut has resulted in the substitution of other woods. Red gum is often sold as Circassian walnut, and butternut is also similar in general appearance to the less highly figured grades. Many good African, Asian and South American woods resemble Circassian walnut, though none possesses the magnificent figure, delicate tones and velvety texture of the latter. The circular discusses the supply and uses of Circassian walnut, and those who wish to know how possible substitutes may be distinguished can learn from this circular the distinctive marks which the government experts have discovered.

Report of Committee on Education

As read before the Forty-sixth Annual Convention of the American Institute of Architects, Washington, D. C., December, 1912.

THIS committee begs to "report progress" in many of the matters referred to in its report to the convention of 1911. As some members of the Institute may recollect, we announced at that time that we proposed to hold an "Educational Conference," made up of representatives of the several Chapters; this took place, was largely attended, prolonged itself well into the next day, and, whether it was stimulating or not to those who took part, was of the utmost use to the committee, which, as announced, will hold another conference at this convention tonight. The committee is deeply gratified to note that this year other committees will follow the same course. This is all eloquent testimony to the supreme importance of personal association, which is of primary value, not only in committee work, but in education, and it is the enforced lack of such association that leads this committee to oppose the educational scheme of correspondence schools, which, in all good faith and with the best intentions, cannot possibly give the human and gregarious elements which are absolutely and primarily essential.

At the Educational Conference of last year it was agreed that the Educational Committee should use its best efforts towards inducing the several Chapters to form Standing Committees on Education (where these did not exist), and to offer its services to such committees, in order that there might be more consistent and energetic activity in this direction, and that it might all be co-ordinated, in a way, through the central committee. The response to our appeals has been most gratifying; several education committees have been established where there was none before, and we have evidence that there is a new activity in this direction. Of course there still remain some Chapters that have taken no action in this matter, and some committees that are apparently content to simply exist. Last year we noted the work of the Boston Architectural Club as an example of what could be done within one Chapter's jurisdiction; this year we wish to call attention to no less active work elsewhere. In Los Angeles, during the past year, a great architectural exhibition has been held by the Southern California Chapter and the Architectural Club acting jointly, the attendance being over forty thousand in numbers. The Chapter has made an appropriation to the Architectural Club Atelier for the purpose of books and equipment, and as a result of this encouragement and support the Atelier has become so strong that it is practically a third architectural body. There are as many working members as the accommodations will permit, with a waiting list, and the chairman reports that in all probability these accommodations will be doubled in capacity during the winter.

This is an admirable example of the sort of support which a Chapter can give to the educational efforts of the Architectural Clubs and Ateliers with good returns of enthusiasm and effectiveness.

Another instance showing the constructive results that may follow such concentrated Chapter action is found in the report to this committee of the Washington Chapter. Here the question has been taken up of restoring the School of Architecture to George Washington University, and the Chapter has succeeded in bringing about this very desirable end, having by its own exertions raised a guarantee fund to provide for salaries, etc., in case the funds derived from the engineering department proved insufficient. As a result the school has been reopened, with a new faculty, and there are already thirty-three registered students.

The Washington State Chapter also sends a report indicating great activity, with commensurate results. In Seattle definite educational work was begun in the year 1907 with the organizing of an Architectural Club, and a year later of an Atelier, associated with the Beaux Arts Society of New York. In the same year the Architectural League of the Pacific Coast was organized in Portland, Oregon. Amongst other work, this organization succeeded in raising the sum of $1,000 for a scholarship, and after some delay this was first awarded this year. Exhibitions have been held, lectures given, and the registrations have increased from 28 in 1910, to 71 in 1911, and to 214 in 1912.

The Washington State Chapter has been actively at work with the Y. M. C. A. in the establishing of evening classes in architectural drawing, and also of a course of architectural lectures; finally it has approached the University of Washington in the matter of the establishing of a department of art and architecture, and it is understood that the recommendations have been received with much interest by the University authorities, and are now being given careful consideration.

We also desire to call attention to the concerted action that has been taken in Pittsburgh towards furthering the education of draughtsmen. Every architect knows that, however desirable it may be for his men to take part in atelier or other student competitions, there is one serious drawback, and that is the necessity of night work and holiday work that puts a strain on him that, to a certain extent, reduces his efficiency in the office. The problems in the evening classes in design at the Carnegie Technical School were due to be handed in on Monday morning, and it was found that the rush of work on the part of the students in finishing their drawings Saturday and Sunday (both day and night) left the men in no condition for regular work on Monday, while the effect of mental preoccupation as well as of fatigue was observed for several days before.

As a result of the activities of the Committee on Education of the Pittsburgh Chapter an arrangement was made with the Carnegie Technical School that the time for handing in the problems should be changed to Saturday night. This enforced automatically a cessation of work on Sunday. In addition, the architects agreed to encourage their employes to take the courses and to give them leave of absence at the time of final rendering of the school competitions of not more than two days for any competition, and not more than eight days in any one year.

It seems to this committee that there could hardly be a better example of sane co-operation than this, with an underlying spirit of friendly encouragement and assistance, which in its cost to the architect is negligible, and in its stimulus to the student may be incalculable.

We should like to cite one more example of new activity. In Kansas City, after much labor by the Committee on Education, action was taken by the Chapter as follows. There existed an Atelier with eight students taking the problems of the Society of Beaux Arts Architects. The Chapter arranged to hire a room for the use of the men throughout the year. In addition to the study of design, courses are to be arranged in mathematics and construction and monthly lectures on the History of Architecture and the Theory of Design. Also in the Chapter meetings papers are to be read on various phases of the practice and the ethics of the profession. The students are to pay $20 for the eight months' term, which will entitle them also to attend all Chapter meetings and all lectures held under the

Extracts from the Proceedings of the Forty-sixth Annual Convention of the American Institute of Architects, Washington, D. C., December, 1912

[CONCLUDED FROM APRIL NUMBER]

But after the 4th, after the trail of fire and death, those ordinances went through on rubber tires. It only needed some prominent citizen's child to be blinded for life by a toy pistol or a cannon-cracker, to remove all opposition to that measure. The work of our organization and the help it has had, has reduced the casualties of the Fourth from 5,000 three years ago to less than a thousand this year. We are going to keep it up and make suggestions for celebrating a sane Fourth; suggestions which will win the child away from the cannon cracker and the toy pistol, into the arena of sports, pageants and that sort of thing.

Then we got out Christmas bulletins, showing the good citizen something he had never dreamed of before—that if a Christmas candle is held up against a bunch of cotton the cotton will burn! Now he uses asbestos for snow and metallic decorations instead of cotton—he just had to be led. We have to build up in him a consciousness of responsibility for the fire waste.

I know it doesn't do any good to preach to people. They tell a good story of Phillips Brooks of Boston—many of you perhaps remember him, a very great preacher and greatly beloved by our people. He used to go every year to the Holy Land and India and study Oriental

Report of Committee on Education

[Continued from Page 85]

auspices. In addition the Chapter has subscribed a sum of money to start an Atelier library.

The committee likes to feel that this activity was very largely stimulated into successful existence by the conference held last year and the assistance and suggestions which this committee has been able to give and which have been so cordially welcomed.

In such practical accomplishment the committee finds a satisfaction quite equal to that of the discussion of theoretical ideals of education.

The extension work for draughtsmen undertaken last year by Columbia and Pennsylvania is being continued with good results; in both cases the students still show an invincible propensity towards "bread and butter" courses, and they shun architectural history, aesthetics and cultural studies as they would the plague. How far it would be wise to go towards dragooning them into a more well-rounded grouping of studies is problematical, but this committee tentatively suggests that whenever a certificate is worded for and given it might be possible for the universities to adopt the group plan of Princeton and Harvard and prescribe one or two compulsory studies when the others are elective, so that no student could devote himself exclusively to mathematics and construction or to planning and rendering, but that a general balance should be maintained.

The committee was much pleased to find last year that there was a general approval by the architectural schools of some instruction in the practice and the ethics of the profession. Each school had its own idea as to methods and the extent to which the instruction could and should be carried. The committee has gone no further in this matter this year, feeling that with the schools definitely in favor of the idea they could safely be left to work out sane solution each according to its own theory.

Similarly with the cross-breeding of knowledge in the engineering and architectural schools. The need of each profession knowing something of the other seems to be generally accepted, and various plans are being experimented with in the different school, which is a most promising fact.

For several years this committee has given consideration to the plan of study formulated by the Architectural League of America, which the league has been endeavoring to develop along lines originally suggested by a committee of the Institute several years ago. The underlying idea was to have a definite outline of work to be accomplished by the students working in various evening classes, and to give credits when any definite portion of the work was successfully completed, the aim of the students to be the acquiring of a complete list of credits which it was hoped might some time be accepted by the Institute as satisfying its educational requirements for membership.

After much consideration we are of the opinion, as a committee, that the schedule is an interesting one, which, if pressed, will develop into a system that will be some stimulus to a certain type of student and so be of some value, but under present conditions is not of great promise. The schedule last proposed was definitely less in certain respects than what would be insisted upon in an accredited school. Manifestly, therefore, the Institute could not well accept it as on a par with the schools which are recognized as furnishing educational opportunities satisfactory to the standard of the Institute.

There is so much pioneer work to be done in getting practical work under way like that referred to above in Kansas City and elsewhere that we can safely leave to the distant future any scheme that is primarily interested in a correlation of the results of education. Let us take care of the instruction; the knowledge will take care of itself.

So as the Institute appears to have been instrumental in starting work along this line, it may properly determine whether in its opinion the work as developed is on the whole worth while. The Institute owes sincere appreciation to many officers of the league for a vast amount of hard work expended on the study of this scheme, and it is to be regretted if effort has in this way been wasted. The work they have done cannot fail, however, to bear some good results, even if indirectly.

Among the various agencies making rather towards the education of the public than the profession none is more efficient than the American Federation of Arts; its activities are numerous, its enthusiasm infectious and we earnestly bespeak for it the unanimous support and co-operation of the members of the Institute.

(Concluded in June Number)

philosophy, and when he came home his parishioners would see these ideas creeping into his sermons. They didn't like it very well, but they were so fond of him personally they never bothered him much about it, but they used to twit him. One Summer he came home and landed on the dock, and the customs officer was going through his trunks—you know what a customs officer does to trunks from abroad; that is what he was doing to the Bishop's trunks. A friend was standing by watching the ruin and said, "I suppose you have brought home a lot of new religions that you have to pay duties on?" The Bishop looked rather sadly at him and said, "No, I would never make that mistake; I would never bring home to the American people any religion *with duties attached!*"

It really doesn't do much good to preach to us, but our attitude must change toward the man who has a fire. Now, what does this three dollars per capita mean? It means every man, woman and child in the nation pays that; pays three dollars a year. An ordinary family of five pays fifteen dollars a year fire tax. We don't know we pay it; we dont realize we pay it because we don't know how we pay it and because we have been blinded by the foolish notion that the insurance companies pay this enormous tax. What is it? Two hundred and fifty million dollars a year; that $30,000 an hour, $500 a minute—for a ten, twelve, fifteen-year period. Two hundred and fifty million every year! Think what we could do with that money! Why, a hundred-thousand-dollar fire in Europe shocks Europe. It is in all the newspapers, they inquire into the cause of it, whether such conditions might exist in their city, who is responsible for it. A hundred-thousand-dollar fire shocks Europe—but if we pick up a paper and don't find two or three hundred-thousand dollar fires we think there is nothing doing! We have ceased to be shocked by any fire except one attended by a holocaust. We cease to be shocked, because we don't know we pay for it. If we realized that we pay for it, and how we pay for it—this fifteen dollars a year for a family of five. It is by indirect taxation. You know the French Physiocrats' definition of indirect taxation: "the method of getting the most feathers with the least squawking." We don't know we are being plucked!

But here is an illustration: Take cotton, for example. Take cotton on the platform, just out of the field. It is insured; that means it is taxed. It is insured in transportation; it pays a tax. It is insured in the warehouse, in the textile factory; it is insured in the clothing store; in the department store; in the dry goods store; all the way along from the cotton field that cotton bears a high rate of insurance, a tax, and the cost of that tax is merged with the cost of the goods. When you buy a bit of cotton goods you pay it all at once in a lump, but it is concealed in the cost of the goods.

Now, we are doing that, we are bearing this onerous burden of $250,000,000 a year. The Government makes it five hundred millions, because the Government, in its cost, adds fire department maintenance. I don't do that I simply speak of a $250,000,000 waste; that we burn; and property burned is gone forever.

Now we have had much help in our publicity work from our active members. One of them, the first active member who took up actively a fire prevention campaign was the National Association of Credit Men. The ordinary citizen never knew about the National Association of Credit Men until it took up this matter of the fire waste It was simply a body that exchanged notes on the credit of their customers, and yet it was a large organization with 15,000 members. They took up this subject of fire waste because they were interested in their customers keeping well insured and keeping their property from being burned. They took up this matter and the National Association of Credit Men immediately emerged into public prominence as an organization that was dealing with great public questions.

Now there is no reason why in the matter of publicity work—I have just had a conversation with Mr Boyd and know what his plans are as chairman of this important committee of yours—there is no reason why you should not, as our active member, with all the help we can get, take up this matter as it has been taken up in two chapters—Philadelphia has had splendid meetings on fire prevention and Boston has had two; those two cities have taken the lead. There is no reason why all the cities—chapters in all the cities should not have a fire prevention evening, considering this important matter, and thus come before the public, not merely as a body interested in your own affairs, but in large public questions as well, and thus make this department the vehicle to carry the news of your profession which the public should know, and which the newspapers will not be interested in because they think they are simply professional questions. You can do that

All the underwriters in the country maintain engineers, fire prevention engineers, who will be glad to consult with you regarding the fire hazard of your building construction.

I say the people do not realize that they pay this tax, but the manufacturers, the merchants, the men that are beginning to build large structures, do realize that they pay, and realize that a little lack of thought from a fire hazard point of view may saddle them with a constant fixed charge for fire insurance, that they might have avoided if their architect had been keen on this one particular matter. That is a growing sentiment and you must expect to meet it in making your plans, as the country awakens to this enormous drain upon its people. It enters into the cost of living and it is a very considerable factor this drain of two hundred and fifty millions a year.

The underwriters will be glad to co-operate with you I am not speaking for the insurance companies. The insurance people are contributors to our work but it is not an insurance organization; it is a public organization in every sense of the word, and should come before the people, and does come before the people, as such.

You can use this fire prevention agitation as a vehicle to reach the people in a new aspect, and incidentally tell them truths about your own profession, about which, as you know, they are sadly ignorant, as they are about the fire waste.

Now the principal thing which we have to combat—in the seven minutes which I have left—is the conflagration hazard. The individual fire is not such a drain upon us for if we give thought to the protection of stairways and elevator wells and those things we can cut down the losses greatly. The thing which impoverishes us is the conflagration, and it is because our cities are unprotected.

When Mr. McFarlane wrote his article for *McClure's* on the conflagration hazard in New York, he wrote to me and asked for suggestions as to how the conflagration hazard in New York might be reduced. Well in view of our experience, it was such a simple question that I replied rather facetiously, that if he wished to reduce the fire hazard in New York, if he extended the big Pennsylvania Station across to the East River and up to 42nd street and down to the Battery he would reduce the conflagration hazard by dividing the city into four conflagration sections by that huge low wall, just to abolish it alto-

gether was a much easier trick than that. All New York City has to do to abolish its conflagration hazard, great as it is, is to protect its window openings—that's all. They build fireproof buildings, so called, and then equip them with wooden window frames and thin window glass. Fire went through such buildings easily in San Francisco, in Chelsea, and in Baltimore. The conflagration would sweep up against the windows, break the panes, burn the frames, and each floor of the building became merely a horizontal flue, full of combustible contents through which the conflagration raged.

But with the adoption of proper window protection, such as proper window shutters (which you can shut—you usually can't; when a fire occurs they are rusted open, in this country) or if you don't have a standard shutter, use metal window frames, wired glass in standard metal frames. Such frames can be so constructed, stayed and locked that they hold that wire glass until a temperature is attained which melts the glass.

Now I do not mean to say that fire could not occur in combustible contents and be so hot that it would not burn out, melt out, this barrier of metal window frames and wired glass, but it would not burn far into another building, similary equipped, with any kind of a fire department; it arrests the spread of fire until the department gets there and checks it, no matter what the wind may be.

Now a brick, stone or concrete building is a fire wall; it is a fire stop of itself if the fire can be kept out of it. All you have to do is to fortify your windows to attain that object.

What is true of New York City is true of all cities in the country. Even the little cities of the country have houses of brick, stone and concrete, and if those buildings are so protected, particularly if there are streets at right angles through the center, built of brick, stone and concrete, you would have the equivalent of a maltese cross fire wall crossing in the center of these small cities.

There is only one thing that can invalidate that proposition and that is wooden shingles. So long as wooden shingles are used, just so long we will have conflagrations The wooden shingle is the worst conflagration breeder we have. Not only does it ignite after months of drouth immediately a spark alights on it, but it furnishes the flying fire brand, where the wind tears it away and drops it around in different parts of the city. That is what burned Chelsea, the wooden shingle.

Any conflagration will have a more or less clearly defined fire line, and that fire line will, of course, get longer as the conflagration advances; but in Chelsea, with shingle roofs, after the first half hour there was no fire line. People three-quarters ahead of the fire worked like demons to get their goods on carts to save them, but before they could move them they had to flee for their lives; the fire was all about them, the burning shingles dropping on other shingled roofs. People had to flee; firemen had to leave their engines and hose in the street and run. Men, women, children, horses, cats, dogs, chickens, swarms of rats, ran in the streets of Chelsea, forgetting their common enmity. So Chelsea burned.

So it was at Baltimore and San Francisco, as you know, and it is all unnecessary. We can check these conflagrations just as eaily as this little group of men checked these factory fires in New England. Desire precedes functioning, the scientists tell us. We must want to do a thing before we develop faculties to do that thing. When we realize this terrible tariff, how it affects us all, how it increases the struggle for livelihood, the tremendous drain on the country that no country, no matter what its resources are, can stand; when we awake and work together for the solution of this problem, when the American Institute of Architects adds its labor and thought to it; when we all realize what it is, the extent of it and how easily we may check this enormous waste; I believe we will begin an era of prosperity finer and better than any of which we have ever yet even dared to dream.

I have delivered an hour's speech in thirty minutes and have talked very rapidly, and can only hope I have been intelligible. Thank you for listening so kindly. (Applause.)

Mr. Lubschez: I should like to suggest that a transcription of Mr. Wenworth's talk be made as soon as possible and in advance of the proceedings of this convention and furnished to the chairman of every sub-committee of the Committee on Public Information through Mr. Boyd's committee.

Motion seconded by Mr. Kohn and unanimously carried.

Mr. Kohn: I move a vote of thanks, Mr. Chairman, to Mr. Wentworth for his very able address.

The President: I should like to second that myself, if nobody else has done so, that a vote of thanks be voted to Mr. Wentworth for his very valuable and illuminating address; presenting a subject not new to us, he has presented it in such a way that it has become new.

Motion unanimously carried.

Mr. Sturgis: I want to ask your permission to allow Mr. Wentworth to speak just three minutes more and tell us to what extent we may look to insurance companies to back us up when we are trying to build better construction.

Mr. Wentworth: Of course I can't answer for individual insurance companies; they are competing for business and have ideas of their own. But we have received very cordial support from insurance companies as organizations, and many of their special agents and agents are members of our association and get our literature regularly. In America we are saddled with the agency system, which they have not in Europe. In Europe they sell insurance over the counter and the men that sell the insurance make the inspections. In this country we have insurance agents, the business is done through agents who receive a commission on their premiums, and many of those agents know very little about the risks which they insure. That is a very great drawback to the insurance companies' attacking the fire waste as they should attack it. They need to weed out these agents who are only interested in getting their premiums and get them usually through social affiliations, and know nothing of the property which they insure. But I believe that the insurance boards and bureaus, with the realization of what they now have to meet, will be very hospitable to any approaches on the part of architects, and I am sure if you wish in any of your chapters to give consideration to this matter you will find the local board of underwriters very anxious and willing to co-operate, also the local chapter of credit men, most of whom have considered those things. (Applause.)

Personals

Architects Tourtellotte & Hummel, of Boise, Idaho, have opened an office in this city at 206-7-8 Rothchild Building.

Architect Lee Le Camp has moved his office from the Selling Building to 301 Empress Building.

Architect H. M. Fancher has moved his office from 329 Henry Building to 103 Sherlock Building.

Architect J. Francis Williams, formerly of the firm of Williams & Truenbach, has moved his office from 229 Lumber Exchange Building to 529, same building.

F. E. Bowman & Company closed a contract for the installation of the Abbott-Forrester Company's low-pressure, electrically-driven, air-atomization, oil-burning equipment for their apartment house on East Seventeenth and Tillamook streets, this city.

The Abbott-Forrester Company received the contract for installation of their high-pressure, oil-burning equipment under the battery of boilers in the Lipman, Wolfe & Company Building.

Architect C. A. Perry, Pacific Building, Vancouver, B. C., has formed a partnership with C. B. Fowler, recently of New York City, and will be known as Perry & Fowler, Pacific Building.

Architect A. A. Cox, of Victoria, B. C., is spending much time at Prince Rupert in the capacity of Provincial architect on government buildings at that place.

The Western Clay Company, formerly located in the Beck Building, has moved into larger quarters in the Bates Dock Building, recently completed. Their new address is 176-78 Burnside street.

Architect A. Leo Ellis, of San Francisco, has opened offices at 821 Shreve Building. Mr. Ellis was formerly with Cass Gilbert, New York City.

Architect Frederick H. Meyer, San Francisco, has opened offices in the Bankers' Investment Building.

Architects MacDonald & MacDonald, San Francisco, have moved their office from the Call Building to Suite 633 in the new Holbrook Building, 58 Sutter street.

Architect Edward C. McManus, San Francisco, has opened offices at 411 Bankers' Investment Building.

The Sound Construction & Engineering Company, with head offices in Seattle, have opened offices at 723-724 Hearst Building, San Francisco, with J. T. Walsh as manager, who was formerly associated with J. L. McLaughlin, of McLaughlin & Walsh, well-known San Francisco contractors.

Architect Loring P. Rixford, San Francisco, has returned from a business trip to Victoria, B. C. Mr. Rixford drew the plans for the Union Club, of that city, now nearing completion.

J. A. Drummond, Pacific Coast representative for the N. & G. Taylor Company, with headquarters at 422 Chronicle Building, San Francisco, is on an extended business trip through the Northwest, calling on the trade.

Hunter & Hudson, engineers, 328 Rialto Building, San Francisco, designed the heating, ventilating and electric work, including the boiler plant and installation, in the Bohemian Club Building, shown in this issue.

The Lilley & Thurston Company, Rialto Building, San Francisco, well-known building material dealers, have issued a handsome booklet on steel rolling doors and shutters, which they are mailing to the trade. Have you received yours?

Architect D. L. Carter has discontinued his office in the Chamber of Commerce Building, retiring from the practice of architecture.

Mr. Fred W. Eastman, formerly of the Far West Clay Company, of Tacoma, Wash., is now president of the Oregon-Dennison Block Company, with offices at 231 Worcester Building, this city.

The Mission Marble Works has opened offices at 503-504 Empress Building, corner Broadway and Yamhill streets, Portland, and are fitting up a beautiful display room showing the products of their quarries.

Mr. John G. Wilson has moved his office from 419 Worcester Building to Room 606, same building.

The Laura Baldwin Doolittle Studios have just finished decorating and furnishing the new private sanatorium established by Dr. Evans, 1201 East Twenty-second street north.

The brick and terra cotta on the Bohemian Club shown in this issue was furnished by the Steiger Terra Cotta & Pottery Works, with offices in the Mills Building, San Francisco.

* * *

A Resume

Recent items selected from the Daily Advance Reports of THE PACIFIC COAST ARCHITECT.

PORTLAND.

Remodeling business block—Architects Sutton & Whitney prepared plans for remodeling a three-story brick building on First and Oak streets, for the Failing Estate, at a cost of $5000.

Fire Station—Battalion Chief Holden prepared plans for a $25,000 fire station, to be erected at the west end of the Steel bridge.

Flat—Plans were prepared by Architect Otto Kleeman for a two-story four-flat building, to be erected by Mrs. Emma Riley, East Twenty-seventh and Belmont.

Business block—Architects Whitehouse & Fouilhoux prepared plans for a two-story building, to be erected by the Tremble Estate, on Park and Oak streets. The building will be a two-story reinforced concrete building, 80x80, and will cost about $50,000.

Hospital—Architects Sutton & Whitney have been commissioned to prepare plans for a County Hospital, to be erected at Astoria, at a cost of about $25,000.

School—Plans were prepared by Architects Emil Schacht & Son for a two-story frame school building, to be erected at Sublimity, at a cost of $6000.

Residence—Arndt Anderson, Architect and Builder, prepared plans for a six-room frame residence for C. F. Anderson, to cost $2500.

Residence—Architect H. M. Fancher prepared plans for a $3000 seven-room frame bungalow, to be erected for J. W Hyatt in Eastmoreland.

Residences—Stokes & Zeller, architects and builders, prepared plans for two one-story frame residences, for Mrs. E J Eden, and a two and one-half-story, half timber residence for C. D. Starr.

Stores and Apartments—Architect Fred A. Legg prepared plans for a brick combination building, to be erected for himself on Fremont and Commercial streets. The building will be a two-story brick, 75x90, and will cost about $12,000.

Store building—Parker & Banfield, architects and builders, prepared plans for a one-story store building, to be erected on East Twenty-first and Hassalo, for L. C. Michelson

Residence—E. Little has commissioned Architects Johnson & Mayer to prepare plans for a two-story Swiss chalet, to be erected in Riverwood.

Library—Architect W. F. Tobey has completed plans for a one-story brick library building, to be erected in Albany, Oregon.

School—Plans were prepared by Goodrich & Goodrich for a $7500 school building, for the Willsburg School District

Club building—Architects Claussen & Claussen have been selected to prepare plans for a club building, for the Portland Turn Verein. The building will be a two-story brick 76x160, and will cost about $40,000.

Residence—Architects Johnson & Mayer are preparing plans for a two and one-half-story, 11-room residence, to be erected on Prospect and Montgomery Drives, for O. R. Menefee.

Remodeling bank—Architects Whitehouse & Fouilhoux are preparing plans for remodeling the Lumbermens National Bank in the Lumbermens building

Apartment house—Architects Bennes & Hendricks have been commissioned by A. C Callan to prepare plans for a $65,000 apartment house. The building will be four stories 60x80, and will have eight apartments to a floor

Residence—Plans were prepared by Architects Bennes & Hendricks for a seven-room Dutch colonial residence to cost $5000, for Gerald Beebe

School—School Architect F A. Naramore prepared plans for an eight-room reinforced concrete school building, to be erected in Kenton, at a cost of $75,000.

Residence—Architects Jacobberger & Smith are preparing plans for a nine-room frame residence, to cost $7000, for G. H Gilpin.

Church annex—Architects Jacobberger & Smith are preparing plans for an addition 80x85 in size, to the Madaline Catholic

Church, on East Twenty-fourth and Siskiyou. It will be a frame building with stucco exterior, and cost about $8000. The same architects are also preparing plans for a Catholic Church, to be erected in Tillamook, Oregon.

Summer home—Plans were prepared by Architect Aaron H. Gould for a $3000 bungalow, to be built at Gearhart Park, for M. Levy.

Theater—The Portland Amusement Company had plans prepared by Architects Bennes & Hendricks for a one-story reinforced concrete theater 50x100, to be erected on Fourth and Burnside streets, at a cost of about $10,000.

Residence—Architects Bennes & Hendricks prepared plans for a two-story, eight-room frame residence, for Edward Moulton, to cost $5000.

Residence—Architects Jacobberger & Smith are preparing plans for a 12-room bungalow, to be erected at Garden Home, for F. I. Webber.

Store building—Architects Claussen & Claussen are preparing plans for a one-story brick store building 25x90, to be built on Broadway and Flanders streets, for W. L. Wood.

Theater and stores—Architect Earl A. Roberts has been commissioned by J. W. Perkins, of Roseburg, to prepare plans for a theater and store building, to be erected at that place. The building will be one story and basement, brick, 80x101, and will cost $10,000.

Residence—Architect Charles W. Henn prepared plans for a two-story frame residence, stucco exterior, to be erected by Judge Morrow, on Summit Drive, at a cost of about $7000.

Residence—Plans were prepared by Architect J. B. Clark for a modern two-story frame residence for Peter Clovis, to cost about $3500.

OREGON.

Apartment house—Eugene. Architect J. R. Ford is preparing plans for an apartment house for Bartle-Sweaney Company. The building will be three stories, of Spanish design, and will have 24 apartments, and cost $35,000.

Pavilion—Estacada. The Portland Railway, Light & Power Company will build a pavilion 40x100, at a cost of $4000.

Buildings—Florence. The Harbor Sound Investment Company of Eugene, is preparing plans for a residence for A. Philgren, and one for W. H. O'Kelley. Also two frame store buildings for Miller & O'Kelley.

City Hall—Ontario. Bonds for $17,000 have been voted with which to erect a two-story City Hall.

Bungalow—Eugene. Architect D. L. Harden prepared plans for a modern six-room bungalow, for James R. Veitch.

Hotel addition—Independence. W. T. Stein will build a two-story addition to the LaRona Hotel during the summer.

School—Near Yamhill. The Episcopalians will spend $20,000 for school buildings, at Oak Hill Farm, this summer. Paul T. Stucke is to be superintendent of construction.

Lodge—Albany. The Knights of Pythias will erect a two-story lodge building 103x134, to cost $35,000.

Asylum buildings—State Architect W. C. Knighton prepared plans for five buildings, to be erected at the State Insane Asylum, at a cost of $20,000.

Hotel—Halfway. C. H. Baird has started work on a $10,000 hotel building.

Library—La Grande. The Carnegie Commission has made an appropriation of $12,500 for a library.

School—Springbrook. At a special election it was voted to erect a $5000 school building.

School—Sweet Home. Plans have been accepted by the Union School Board for a $6000 Union High School building.

School—Yoncalla. Architect John Hunzicker, of Eugene, has prepared plans for a two-story brick school building, to cost $25,000.

School—Cottage Grove. Frank H. Morrison, architect and builder, of Dallas, has been commissioned to prepare plans for a two-story, eight-room brick school building, to cost $40,000.

Church—Monmouth. The Christian Church has had plans prepared for a modern church edifice.

Y. M. C. A.—La Grande. A campaign has been started to raise a $35,000 fund with which to erect a club building.

City Hall—Oregon City. A movement has been started for a new city hall. It is planned to erect a four-story reinforced concrete building to house all the city departments.

WASHINGTON.

City Hospital—Seattle. City Architect Daniel Huntington has completed plans for buildings for the Tuberculosis Hospital. There will be four one and two-story buildings, constructed of tile and faced with brick.

Theater—Seattle. Architect John A. Creutzer prepared plans for a two-story brick theater building 60x108 for the Colonial Amusement Company.

Lodge building—Colfax. The Knights of Pythias are having plans prepared for a two-story brick lodge building 70x100, to cost $14,000.

Business block—Pullman. Levi Ankeny, of Walla Walla, will erect a two-story brick business block.

Factory—Spokane. Architects Keith & Whitehouse are preparing plans for a three-story concrete and brick warehouse, for the James McKee Printing Company, to cost $50,000.

Residence—Spokane. Architect Earl W. Morrison prepared plans and let the contract for a nine-room, $8000 residence of colonial design.

Garage—Seattle. Plans are being prepared by V. W. Voorhees, for a two-story brick garage, to cost $25,000, to be erected for J. W. Levitt.

Theater—Cosmopolis. Architect C. E. Troutman, of Aberdeen, prepared plans for a theater.

Theater—Spokane. Local capitalists propose to erect a modern Class A theater building, to cost not less than $250,000.

Normal School—Cheney. Architect Julius A. Zittel, of Spokane, is preparing plans for a building for the State Normal School. The building will be three stories 262x64, and will be of fire-proof construction, faced with pressed brick and terra cotta.

School—Foster. Architects Stephens & Stephens, Seattle, are preparing plans for a four-room addition to the Foster School, to cost $10,000.

Residence—Seattle. Architect Julian Everett is completing plans for a two-story brick residence to cost $50,000, for Jules Redelsheimer.

Remodeling theater—Aberdeen. Harry Chandler announces that he will remodel and enlarge his theater at a cost of $15,000.

Warehouse—Seattle. Captain A. C. Powell has been commissioned by the Port of Seattle, to prepare plans for a five-story reinforced concrete warehouse, to cost $100,000.

Theater—Seattle. Architect B. Marcus Pretica will start plans at once for a $350,000 theater building for Alexander Pantages.

Business block—Leavenworth. Architect Robert Brown, Seattle, is preparing plans for a three-story concrete and brick building, for A. C. Barcley, at a cost of $25,000.

Church—Pullman. Plans were prepared by Architect William Swain for a $20,000 church, to be erected for the United Presbyterians.

Jail—Pasco. Architect Van Dusen prepared the plans for a $20,000 jail, to be built by Franklin County.

Printing shop—Aberdeen. Welsh & Richards are planning to build a two-story brick building 25x100, to be used for a printing shop.

Court House—Seattle. Plans prepared by Architect Warren Gould, for a $950,000 Court House, have been approved and bids will be opened June 3.

Hotel—Spokane. Architect C. Harvey Smith is preparing plans for a hotel for M. C. Weir Company. The building will be a five-story reinforced concrete building, 130x142, and will cost $250,000.

Alteration, office building—Seattle. Architect A. J. Russell has completed plans for altering the interior of the Eilers building, at a cost of about $20,000.

School—Seattle. Plans have been prepared by School Architect Edgar Blair for a two-story $50,000 brick addition to the West Woodland School, also plans for a two-story reinforced concrete school building, to be erected at Madison Park, at a cost of $75,000.

Hotel annex—Aberdeen. Architect C. E. Troutman prepared the plans for a three-story concrete addition 50x60 to the Rockwell Hotel.

School—Aberdeen. Architect C. E. Troutman prepared plans for an eight-room, two-story school building, to be erected in the West End.

Theater—Toppenish. Joseph Bunnell will build an addition to his theater 46x90 in size.

Store and club—Vancouver. Architect D. Nichols is preparing plans for a two-story brick building 100x100, to be erected for J. D. Myers, at a cost of $20,000.

Business block—Bremerton. Architects Huntington & Loveless, Seattle, prepared plans for a two-story addition to the B. F. Harrison building, to cost $20,000.

Settlement Home—Seattle. Architect B. Marcus Pretica is preparing plans for a two-story building 50x112 for the C. J. W., to cost about $20,000.

Residence—Seattle. Architects Sunders & Lawton prepared plans for a two-story frame residence for W. S. Allen, to cost $4500.

IDAHO.

Business block—Troy. T. H. Christie is contemplating the erection of a modern two-story brick business block, 70x120.

Business block—Kooskie. J. L. Gross has begun work on a two-story concrete business block.

Business block—Pocatello. E. C. White & Company had plans prepared for a modern two-story brick store and office building.

Bath-house—Lava Springs. Architect Marcus Grundfor, Pocatello, is preparing plans for a bath-house, to cost about $10,000.

Depot—Plummer. Work has been started on a $12,000 depot for the Chicago, Milwaukee & St. Paul Railroad.

Court House and Jail—Pocatello. Architect W. A. Samms has been commissioned to prepare plans for a two-story addition to the Court House, to cost about $30,000.

Lodge building—Bonners Ferry. Architects Keith & Whitehouse, Spokane, are preparing plans for a two-story brick building for the Knights of Pythias, to cost $15,000.

Store building—Pocatello. A. W. Fisher will erect a one-story concrete store building 30x100.

School—Bonners Ferry. Architects Keith & Whitehouse, Spokane, have been commissioned to prepare plans for a two-story brick school building.

BRITISH COLUMBIA.

Stores and Apartments—Vancouver. Architect William F. Gardiner prepared plans and let the contract for a four-story store and apartment building, for Barrett & Deane, to cost $50,000.

Office building—Vancouver. W. H. Lucas is contemplating the erection of a 10-story, fire-proof office building 50x120, to cost $600,000.

Theater—Vancouver. Architects Braunton & Leibert are preparing preliminary plans of the proposed theater building, to be erected by Walter Sanford.

School—Victoria. Architect E. E. Watkins prepared the plans and let the contract for a $65,000 two-story, eight-room brick school building.

Hotel—Kamloops. Architect W. T. Whiteway prepared plans for a five-story brick hotel building, to cost $250,000, for the Kamloops Hotel Company.

Residence—Vancouver. Plans were prepared and the contract let by Architects McKenzie & Kerr for a $30,000 residence, to be erected for F. L. Buckley.

SAN FRANCISCO, CALIFORNIA.

Bakery—Plans have been completed by Architects Welsh & Carey for a two-story brick bakery and stable, to cost $30,000, for Richard I. Whelan.

Store and Rooming House—Architects Edward A. Larsen and David C. Colman have plans prepared for a three-story $10,000 store and rooming house for William Strenli.

Apartment House—Architect Harry Skidmore has revised plans prepared for a six-story brick apartment house for L. B. Burnett, to cost $50,000.

Hotel—Plans are being prepared by Architect Herman Barth for a four-story hotel 52x75, to cost $25,000.

Store and Office—Architects Miller & Colmesnil have prepared plans and let the contract for a three-story store and office building, to cost $60,000, for the Santa Christiana Investment Company.

School—Plans were prepared by Architect William H. Weeks for a one-story, six-room reinforced concrete school, for Maxwell School District.

Apartment House—Architect W. G. Hind prepared plans for a three-story frame apartment house to cost $28,000, for Dr. Clyde S. Payne.

Apartment House—Architect Maxwell G. Bugbee prepared plans for a four-story brick apartment house for Charles Stanton to cost $60,000.

Residences—Plans were prepared by Architect C. M. Cook for two frame residences to cost $5000 each for J. W. Howard. The same architect also prepared plans for three $5500 residences for Mrs. McCroskey.

Hotel—Plans are being prepared by Architect Charles J. Rousseau for a seven-story steel and reinforced concrete hotel building, to be erected for Hansen and Johnson, at a cost of $70,000.

Church—Architect John J. Foley prepared plans for a $25,000 Catholic Church to be erected at Modesta.

Residence—Architect John Hudson prepared plans for a $20,000, 14-room frame residence to be erected in Berkeley, for Mrs. E. J. Culver.

Apartment House—Architect William H. Weeks completed plans for a seven-story steel frame and brick apartment house for the Charles C. Judson Estate, to cost $80,000.

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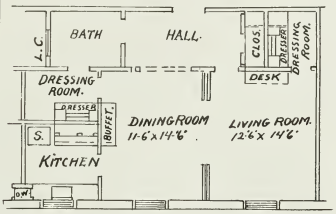

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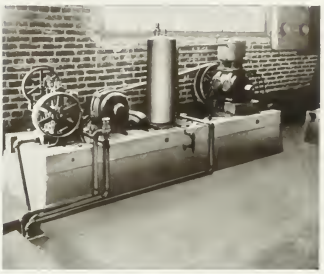

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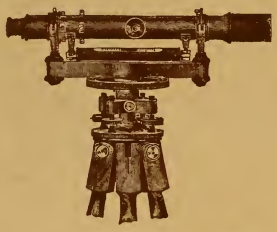

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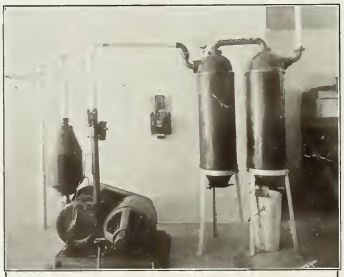

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ADVERTISING RATES ON APPLICATION — TELEPHONE MARSHALL 236

Current Comment

Seattle is shipping sand to Honolulu to be used in concrete.

* * *

The highest chimney is in Glasgow, Scotland, and is 474 feet high.

* * *

Architecture is made the subject of this beautiful metaphor: "Architecture is frozen music."

* * *

The compasses of ships making port at New York, are claimed to be affected by the big steel buildings there.

* * *

To overcome frost in the ground, so as to permit excavation for sewers, unslaked lime has been successfully used at West Liberty, Iowa.

* * *

By means of machinery to vibrate the surface of freshly laid concrete pavements crushed granite is forced into them to strengthen them by a Texas inventor.

* * *

Professor G. A. Reisner, of Harvard, reports that he is solving the mystery of the Sphinx. He has found a temple in the head, 11 by 60 feet, connecting with another temple lower down.

* * *

Charlottenburg, a suburb of Berlin, has a novel four-story building to accommodate the horses of its street-cleaning department. Inclined planes placed at an easy angle on the exterior, enable the horses to reach their quarters.

A man in Guthrie, Oklahoma, has built a three-story house, circular in form, presenting the general appearance of a cone, each story being smaller than the one beneath. The three rooms on the first floor are shaped like sections of a pie.

* * *

The recent tornado at Omaha proved a striking illustration of the necessity to enforce solid construction in buildings. Flimsy structures went down like houses of cards. Had there been more solidly constructed buildings, there would have been less devastation.

* * *

The temperature of an oxyacetylene torch equals nearly that of the electric arc—6000 degrees Fahrenheit. The torch is being used with great effect in wrecking concrete buildings in Chicago. The intense heat disintegrates the concrete into globules, which run, similar to water.

* * *

Salem's Building Record

Salem, Oregon, expended $864,000 in building improvements last year, which exceeded all previous records. During the first four months of 1913 the total value of new buildings is placed at $143,000. There is much activity along this line, and conservative estimates are to the effect that the 1913 total will approximate $1,000,000.

* * *

Seattle Company Invades Portland

The properties of the Western Clay Company, Portland, have been purchased by the Denny-Renton Clay & Coal Company, of Seattle. Blaine R. Smith, a pioneer in the clay industry, will remain with the new concern as manager. The sales manager is Dan J. Maher, and Harold S. Smith will be superintendent of the factories located in Portland and at Vancouver, Washington.

* * *

Compliments Portland's Building Inspector

A high compliment was recently paid Building Inspector Plummer, of Portland, by the Building Inspector of Louisville, Ky. A letter from the latter states that the Portland official's office performs more work, according to the size of the force employed, than does any other similar department in the United States. The Louisville official is desirous of learning the methods employed in Portland, which make so largely for success. In a letter he congratulates Building Inspector Plummer for the excellent showing made by his department in 1913.

Building Statistics Western Cities for April

The American Contractor, of Chicago, recently compiled building statistics from 64 of the more prominent cities of the United States, covering the month of April. For the entire country there was not as heavy a volume of business as for April, 1912, when the grand total of $83,042,205 was reached, while for April, 1913, the amount was $78,188,540. This is a reduction of but 6 per cent, which, when distributed among the cities named in the compilation, makes the average reduction very small. That Portland, Oregon, should show a gain of 27½ per cent, is reassuring. We glean the following relative to western cities:

Oakland, $652,490, as compared with $742,788 last April.

Portland, $2,887,885, as compared with $2,305,936 last April.

Salt Lake City, $277,151, as compared with $192,350 last April.

San Francisco, $3,152,020, as compared with $1,916,659 last April.

Seattle, $840,595, as compared with $1,235,230 last April.

Spokane, $198,363, as compared with $193,910 last April.

Tacoma, $160,759, as compared with $124,607 last April.

The figures for the first four months of 1913 and 1912 for the foregoing cities show the following:

Oakland—1913, $2,645,975; 1912, $2,261,219.

Portland—1913, $5,591,230; 1912, $6,093,176.

Salt Lake City—1913, $659,215; 1912, $583,640.

San Francisco—1913, $8,438,000; 1912, $8,144,308.

Seattle—1913, $3,638,780; 1912, $3,313,000.

Spokane—1913, $431,076; 1912, $748,470.

Tacoma—1913, $2,048,756; 1912, $1,427,013.

Architect Selected for One Million Dollar Alameda County Infirmary Building

The jury of architects, physicians and supervisors on June 10 announced the selection of Charles Peter Weeks, Mutual Bank Bldg., San Francisco, as the architect for the $1,000,000 group of buildings for the Alameda County Infirmary. The selection was made by the jury after several days' deliberation. Twenty-four sets of plans were received and in addition to awarding first prize to Mr. Weeks, which carries with it a commission of six per cent of the cost of the buildings and $5,000 cash, the judges awarded ten prizes of $1,000 each to the following:

J. J. Donovan, Oakland; W. H. Ratcliff, Jr., Berkeley; Kenneth MacDonald, Jr., Righetti & Headman, William Mooser, Leo J. Devlin, O'Brien & Warner, A. R. Widdowson Co., of San Francisco; C. W. Dickey, Oakland, and Ellis F. Lawrence, Portland, Ore.

Architect Weeks' plans call for a group of Class A buildings of one, two and three stories each, with an administration building in the center and the various wards and hospital buildings arranged in a semi-circle. The thirteen other contestants were as follows:

Palmer, Hornbestal & Jones and Butler & Redman, of New York; Walter D. Reed, Ivan Satterlee and Tarlof Camizon, of Oakland; Cheeseborough & Van Eton, Salt Lake; Maybeck & White, Paff & Co., Dolliver & Barth, Ralph Warner Hart, Ward & Blohme, Mitchell & Hodges, John Bauer, all of San Francisco.

Architects Who Will Decide on California's Best School Buildings

A rather difficult task has been assigned to a committee of California architects—that of determining to the satisfaction of the State Superintendent of Public Instruction what constitute the best designed school houses in the cities and counties of the state, the selections to be made from plans and phtotgraphs submitted by the various school superintendents and principals. The idea is to provide a useful handbook for schools that contemplate new buildings. The following architects have been chosen by Superintendent Hyatt to pass judgment:

Lewis P. Hobart, chairman, San Francisco; Chas. H. Cheney, secretary, San Francisco; Robert Farquhar, Los Angeles; J. J. Donovan, Oakland; J. W. Woollett, State Architect; Chas. S. Kaiser, Sacramento.

Vancouver Architects' Exhibit

The First Annual Exhibition of the Vancouver (B. C.) Chapter of the Society of Architects was opened in the British Columbian city, June 21, 1913, at the Progress Club. A Vancouver paper said well of the event: "As an educational movement and for the development of civic beauty along practical lines, nothing perhaps has ever been undertaken in Vancouver that quite so much absorbs the interest of those interested in architecture and its allied arts."

The exhibition marked a period in the evolution of Vancouver architecture. Quality and beauty, grace and outline, dignity of mass, subtlety of proportion, harmony of color and coherence of composition, were the factors represented by the unity of the public, the architect and the builder, at this exhibition. In these too, were combined public sympathy, the faith of the architect and the loyalty of the builder. A series of evening lectures were given during the exhibit.

An Unusual Undertaking

Early in the month an unusual undertaking was successfully carried out at Vancouver, Washington. An 800-ton concrete power station, the property of the Portland Railway, Light & Power Company, was jacked up, placed upon rollers and moved for a distance of more than a mile. It was originally erected by the Mount Hood Power Company, whose properties were later acquired by the Portland Railway, Light & Power Company. In its former location it was useless to the latter company, so it was decided to place it on a new site, at the foot of Main street. Its original cost was $11,000 and the price of removal was $5000. The contract was finally let to Andrew D. Moodie, of Portland. It was first propelled to the right-of-way of the Spokane, Portland & Seattle Railroad. There it remained until permission was given by the latter to cross its tracks and to temporarily clear away a 50-ton wooden span extending across Reserve street. So rapidly did the contractors perform their work, that within less than an hour after the span was taken away, the building had safely crossed its right-of-way. The span was vertically elevated by means of cranes and cables and was afterwards lowered again to its former position. There was not the slightest hitch or mishap in either process. The building included huge transformers, oil cut-outs and other mechanical contrivances.

Third Annual Exhibition of the Architectural League of the Pacific Coast and Fifth Exhibition of the Portland Architectural Club at Portland, Oregon, June 2-21, 1913

During the early days of the month, and while the Portland Rose Festival was at full swing, practically the entire eighth floor of the great Lipman, Wolfe & Company building was given over to a most notable event. It comprised the third annual convention of The Architectural League of the Pacific Coast and the fifth exhibition of the Portland Architectural Club. It was by far one of the best and most comprehensive exhibits ever shown in this section of the country.

The exhibit opened Monday, June 9, to continue for the period of two weeks. It was a representative display, embodying the better of the more recent work of the Pacific Coast architects.

Competitive drawings of several public buildings were shown by Bliss & Faville of San Francisco, as well as the interior of the Oakland Hotel excited much favorable commendation. Among other work shown, executed by San Francisco architects, were the Masonic Temple, Columbia Theatre, Liverpool & London Insurance building, etc. The Crocker residence, the D. O. Mills Bank in Sacramento and some work for the San Francisco Water Commission, were shown by Willis Polk, of the Bay City. Much interest was shown by visitors in photographs of the Panama Exposition drawings. Other architects making exhibits were B. G. McDougal, L. B. Dutton & Co., Walter H. Parker, George W. Kelham, Bakewell & Brown, Fabre & Bearwald.

The features of setting and landscape work was exemplified in the photographs of Southern California residences, displayed by Elmer Gray and Myron Hunt. The drawings of the Little Theatre, Los Angeles, by Morgan, Walls & Morgan, proved attractive, as did also the drawings by Withey & Davis, Thomas F. Powers and S. B. Marston of handsome homes in Los Angeles and Pasadena.

The hearty co-operation of California, Washington and Oregon architects was most gratifying. The representative work from Seattle architects was shown in the following: W. Marbury Somervell, Queen Anne Branch Library and Mr. Somervell's country house and grounds; Howells & Stokes, Metropolitan Theatre; John Graham, Faruva building and the Bon Marche; Somervell & Putnam, the Bank of Ottawa, Vancouver Club, Railway Hotel, British Columbia Electric Company's building and the proposed park scheme for the City of Vancouver—all high types of work in the British Columbia city.

Several fine houses were shown by Wilcox & Sayward as well as the Washington Park aqueduct. Carl F. Gould, Wilson and Loveless and Willatzen & Byrne exhibited some excellent houses. William W. Keellogg presented attractive interior views of fireplaces, tiling and other work.

From Tacoma, Heath & Gove showed school buildings, Ballard & Hill a Museum of Arts, and M. B. Potter and Dugan & Lewis, residences.

Cutter & Malmgren, of Spokane, exhibited photographs of the stately home of Chester Thorne; Keith & Whitehouse, the Spokane Country Club; C. Harvey Smith, apartment houses and residences. The firm of Wilder & White, who competed and won, exhibited its successful drawings for the Washington State Capitol group at Olympia. The drawings also of the other competitors, Bliss & Faville and W. Marbury Somervell, were on exhibition.

Among the exhibits concerning Portland were a portion of the Greater Portland Plans, by E. H. Bennett, of Chicago. Three building architects from Portland, now students in the Massachusetts Institute of Technology, together with one other student there, had an exhibit of their school work.

The art school of the Portland Art Association presented an attractive exhibition of paintings and drawings from life. These exemplified the work of the composition class. The $1000 scholarship prize drawings of the Pacific Coast League of Architects attracted a great deal of interest

Among the Portland architects exhibiting were these: F. A. Naramore, Lloyd Dittrich, Russel E. Collins, John Bauman, Roy Wright, Charles C. Rich, Emil Schacht & Son, Lazarus & Logan, Bennes & Hendricks, John G. Wilson, Aaron Gould, Tourtellotte & Hummel, Bridges & Weber, George Foote Dunham, Gardner Manning Gale, Wm. J. Kratz, F. A. Burton, Lewis E. Macomber, Ernst Kroner, J. Terry Wilding Johnson & Maver, Sutton & Whitney, Albert Sutton, Lawrence & Holford, William G. Holford, Ellis F. Lawrence, Lewis I. Thompson, Otto Kleeman, David C. Lewis, D. L. Williams, Jacobberger & Smith, Whidden & Lewis, Whitehouse & Foulhoux, Doyle, Patterson & Beach.

A three-day session of the Convention of the Pacific Coast League of Architects opened Tuesday, June 10. The Portland Architectural Club rooms were headquarters.

On the opening day of the convention, President Ellis F. Lawrence submitted his annual report, covering the work accomplished by the Architectural League of the Pacific Coast during the past year. He earnestly advised that the educational work, so fruitful in results, be continued. He took as a favorable indication, the steady and vigorous growth in the number of students enrolled and those working in the several Western ateliers. These have increased from 111 in 1912 to more than 200.

Thirty-six students participated with preliminary sketches, 13 completed final drawings in the $1000 prize offered by the League.

Chandler I. Harrison, of San Francisco, won the annual prize, choosing as his subject, "A Building for the Supreme Court of the United States."

In a communication from Charles R. Alden, Director of Works of the Panama-Pacific Exposition, San Francisco, touching upon the practical application of city-planning, he said, among other things:

"The architect, by virtue of his profession, has the vision of the city sensible, practical and beautiful. The architects of the Coast have already applied this gift to the public service in securing city plans embodying these things. It is this opportunity that is presented to the League."

Following the suggestions, a resolution was adopted to appoint a civic development committee, of which Mr. Alden will probably become chairman, the other members being drawn from Pacific Coast cities having city plan projects under consideration. Such a committee would become a

valuable auxiliary in the gathering of data and statistics, lantern slides, literature, etc., available for publicity work.

At Tuesday's session Professor Perry of the University of California suggested that schools be established at Seattle, Portland and San Francisco, to carry out the educational idea for architectural students. Each might award prizes to atelier students for their projects, and thus aid in the completion of art training. This did not signify a divorcement from the Beaux Arts Society of Architects of New York, he explained, but a working in conjunction therewith. He declared that in the founding of numerous ateliers, much advaucement would be made, because the teacher often learned tenfold as much as the student. He referred to the Ecole des Beaux Arts of Paris, the American Society of Beaux Arts Architects and the School of Architecture at the University of California. He outlined their advantages, making the Ecole des Beaux Arts the premier of all, though each had its peculiar advantages.

Professor Perry was ably seconded by Professor Duval of the Oregon Agricultural College, who reviewed his efforts to secure an Architectural course for his institution. Then followed a general discussion.

The visiting architects were given an automobile trip to Chanticleer at Rooster Rock, on the Columbia, succeeded by a luncheon at the Automobile Club. Then came a baseball game at the Waverly Club with a six o'clock dinner, followed by the return to the city in the launch *Eva*, in time to witness the electrical parade of the Rose Carnival, in the evening.

Wednesday, June 12, was the final day of the convention. In the evening it was formally brought to a close with a banquet at the Hotel Oregon. Seattle was chosen as the place of meeting for the League next year. A League manager will be selected for exhibits, but definite action was not taken until other cities report as to the manner in which such matters are conducted. Officers chosen for the ensuing year were: Carl S. Gould, of Seattle, president; Myron Hunt, of Los Angeles, vice-president; J. S. Cote, of Seattle, secretary, and W. C. Hayes, of San Francisco, treasurer.

Giving a Brick Man Credit

One of the things that does much to help encourage a man in any effort is to receive proper credit or recognition for his work. Therefore the brick manufacturers should appreciate the attitude taken by Architect Arthur F. Woltersdorf, of Chicago, who in his talk on the advancement of brick architecture at the B. B. A. annual meeting gave the brick man credit for more of the good work in the way of advancing architecture, especially in the ordinary home, than the architect. He did not go into details of any great length as to how and where the brick men deserve credit, but all those who have been boosting brick for home building in their community know pretty well how they have helped the cause along by printing pictures of attractive designs in brick houses and in suggestive plans that embody both beauty and utility without extravagant cost. This encouragement from the architect should stimulate even greater effort on the part of brick manufacturers. It shows what they have done and what they can do, and that already their efforts are being recognized, so let us make this but the beginning of a great work that is to be carried on through years and years and ages and ages until when a man thinks of building a home he will just naturally think of brick, and when thinking of a brick home will be inspired to add such elements of beauty as will make and keep it attractive as well as the most permanent.

Trenchant Pen of Fitch on American Art

George Fitch, the well-known syndicate humorist, turned his pen to the subject of "Architecture" recently with this result:

"Architecture," wrote Mr. Fitch, "is the art of designing a building which will not only be handsome today, but will be handsome fifty years hence, when the styles have changed.

"There are thousands of handsome structures in America today, but that is largely because we have gotten used to them. There are also thousands of middle-aged buildings which cause the casual observer to sigh for a pair of blinders. Most of these buildings were handsome when they were designed, but the people have recovered from the taste which allowed them to admire their particular varities of warts, protuberances, bulges, fret work, low-browed porches, and jig-sawed jamborees.

"Architecture is one of the noblest of callings because it produces beauty which makes glad the eye from century to century. The patient architects who designed the cathedrals of Europe eight hundred years ago for two shillings per day have long been dust, but people still travel thousands of miles to view their work and to grow and expand esthetically while gazing into the soaring vaults or pillared naves.

"America is full of frame houses designed by occupants of some violent ward; of modest homes designed by a cutter of cheese; and of mud-colored railroad stations built by a barn-builder who has fallen from his high calling. In time the men who perpetrate these things die but the buildings live on in spite of our beneficiently high fire losses.

"After a good architect has lived around these things for a while he renounces his citizenship with a throbbing cry of pain and flees to Rome to live among the ruins of 2000 years ago when they tried architects for their buildings and hanged them if they didn't suit.

Will Build New Plant

President O. E. Heintz, of the Pacific Iron Works, announces that within six months the plant will be moved to a new site from its present location at the east end of the Burnside bridge. The company has purchased a six-acre tract on the north side of Sullivan's Gulch at East Twenty-ninth street, east of the plant of the Doernbecher furniture factory. Here it will erect a steel structural shop 600x60; machine shops, 200x60, and a pattern shop, 50x100. When the new plant is established, the capacity of the Pacific Iron Works will be doubled, and three times as many men employed. The Pacific Iron Works has occupied its present site for 16 years. Under Mr. Heintz' able management it has steadily advanced, and is one of the best known plants of its kind on the Pacific Coast.

Northwestern Summer Festivals

In line with the effort now making to advertise the Pacific Northwest as the Playground of America, the O.-W. R. & N. Co.'s General Passenger Department has issued a beautifully illustrated folder. It calls attention to the following events: Rose Festival, Portland, June 9-14; Pow Wow, Spokane, June 16-21; Montamara Festo, Tacoma, July 4-8; Golden Potlatch, Seattle, July 16-19.

The Laying of a Tile Floor

Makers of floor tiling are frequently asked by customers for directions for laying the tile, and according to Charles Hilf, in the *American Architect*, the main difficulty in laying a tile floor or border is encountered in doing the work so it does not sound loose or hollow when walking over it. He says there are only a few rules to be observed for best results. These he enumerates as follows: "The tile should be laid upon mortar; about three parts of very coarse sand and one part cement. This mixture should not be too wet, although of sufficient dampness for cement in solution to work up to the top when tile are tapped in place. The mortar bed should be evenly spread so that the four corners of the tile rest firmly, then the tile should be tapped in the center, otherwise there will not be an even bed underneath, causing it to sound hollow. Marble tile cannot be floated as encaustic or ceramic tile, for edges rubbing against each other would chip, hence one tile is laid at a time.

California Architectural Commission

A commission to consider the improvement of the architecture and surroundings of all public buildings, whether state, county, municipal or school, has been created by the adoption of Senator Birdsall's concurrent resolution by the State Legislature. Three legislators from each house, and an advisory committee of sculptors, painters and architects are to constitute the commission. The bill provides as follows:

SENATE CONCURRENT RESOLUTION NO. 16

Relative to the Appointment of a Committee of the Legislature to Consist of Three Senators and Three Assemblymen, Which Committee Shall Have Power to Appoint an Advisory Committee of Architects, Sculptors and Painters to Constitute a Commission with a View of Reporting to the Governor Ways and Means of Improving the Standard of Architecture and Painting in the Furnishing, Decoration, Repair and Construction of All State, County, School and Municipal Buildings, Grounds and Public Works Throughout This State

Whereas, The state and various counties, municipality and school districts thereof have from time to time expended large sums of public moneys for the furnishing, decorating, repairing and construction of various public buildings, structures, works, and grounds; and,

Whereas, Said expenditures have in the past been made without reference to maintaining a definite high standard of architecture, sculpture, and painting; and,

Whereas, The results obtained for such expenditures in many instances, from lack of proper advice or complete investigation, are inadequately planned and much below what the people of this civilized state are entitled to receive; and,

Whereas, The State of California, with its rich heritage of climate and all inspiring scenery is pregnant with an art that should rival ancient Greece and Italy; and,

Whereas, The citizens of this state by their labor and industry, and by the early establishment of an unequalled educational system have advanced to a culture which decries the unprofitable and unsightly perpetuation of the makeshifts and temporary and hasty structures which in pioneer times were necessary; and,

Whereas, The citizens of this state are entitled to the development of standards of architecture, sculpture and painting equal to, if not better, than those existing in the eastern and middle western sections of these United States; and,

Whereas, The State of Illinois, the City of New York and other states and municipalities have by the establishment of art commissions and other regulating bodies definitely taken steps to elevate and maintain such standards of architecture, sculpture and painting; now, therefore, be it

Resolved by the Senate of the State of California, the Assembly concurring, that a committee of three senators and three members of the Assembly be appointed by the president pro tem. of the Senate and by the speaker of the Assembly, which committee shall have power and it shall be its duty to appoint as advisory members thereof, three architects, a painter, a sculptor, and a lawyer, all of whom are known for their desire to improve standard of architecture, sculpture and painting, which committee shall constitute a commission to investigate and report to the governor, ways and means of improving and elevating throughout this state, the standard of architecture, sculpture and painting on all state, county, school district and municipal buildings, grounds and public works; and the furnishing, decorating and embellishment thereof; and be it further

Resolved, That said report, together with the recommendations of said commission, shall be filed with the governor at least forty days prior to the convening of the forty-second session of the California State Legislature; and be it further

Resolved, That the investigations and report of said commission shall be conducted and made without expense to the state.

Advocates Laying Walls in Cement

The "reckless caprice" of whirling storms, so often figuring in current description, disappears before the trained observer, says the *Engineering News*. The madness of the storm is discovered to be essentially methodical. Except in a few cases, buildings moved from their foundations (at Omaha) were rotated in a direction opposite to that of the hands of a clock. And the great prime destructive force of the tornado is not the impact of whirling air. It is the explosive force of air confined.

A tornado is the low pressure center of a great, thrashing whirl of air. When the part vacuum which the storm carries at its heart envelops a building the air within the building presses outward. Windows are great safety valves. Buildings with large auditoriums suffer more than those with small rooms. Solid walls suffer relatively little, but brick walls with an air space between courses are split by the explosive force of the confined air. Mortar-laid walls go down where cement resists.

Recommendations for tornado-proof construction are somewhat as follows:

Lay all walls in cement.

Do not leave air spaces in brick walls.

Provide ample window space.

Tie buildings to foundations and roofs to walls. The outrushing air follows the easiest path. It pays to have the windows blown out rather than to have the roof lifted to equalize the wind pressure and then dropped back upon the house, or the house itself lifted from its foundations by the upbulge of the confined air in the basement.

Use diagonal bracing wherever possible.

Since these are counsels of good building sense, irrespective of the peculiar stresses of tornadoes, it will surely pay architects and engineers to take them seriously into consideration. While it seems probable that nothing can resist the tornado's maximum violence, that violence is exerted on but an insignificant part of the area of a given storm.

THE BEAUTIFUL HOTEL OAKLAND

By Ailee F. Hunt.

Standing not far from the shores of Lake Merritt, the beauty spot of Oakland, California, is the new Hotel Oakland, a monument to the enterprise and civic faith of the people of the city. There is no hostelry which has the same unique history, no hotel establishment which can boast that it is the gift of the people of a community to "the stranger within the gates" and built for the express purpose of entertaining visitors as the people of that community believe such guests should be entertained.

Any city points with pride to its public buildings, its parks, its business and commercial enterprises as indicative of its growth, and is justified in such pride. Municipal buildings, parks, schools and such like are the product of much campaigning, the voting of bonds during the enthusiasm of a few days or weeks, but the Hotel Oakland represents far more than this. It represents the continued faith of the people of Oakland, not for a few weeks or a few months, but for six long weary years in which there was much to discourage, much to dishearten and many other problems to meet and solve. During these same years many other public matters involving millions of dollars were cared for. Bonds for new school buildings, a new city hall, a municipal auditorium, park land and the improvement of the same, and bonds for the development of the waterfront were voted. In the redemption of such bonds the heaviest burden falls on the large commercial institutions and the large realty holdings. In spite of this, and in spite of the stringent times during and following the financial panic of five years ago, the idea of a magnificent hotel, one which would rank with the finest in the country, was never lost sight of, and those on whom the heaviest burden fell for municipal improvements contributed of their private means in order that the hotel might become a reality.

The building covers nearly two acres in the heart of the city, and is situated near to Lake Merritt, as has been already stated. This lake is fed by the waters of the estuary, an arm of San Francisco bay, and the shores of the lake furnish the big recreation center of the city. Here are tennis courts, bowling greens, flowered walks, a music amphitheatre, and the lake furnishes ample opportunity for rowing, canoeing, yachting and motor-boating. The Hotel Oakland is centrally located for travel of all kinds, and on the direct line of motor tours through Alameda county. San Francisco is thirty minutes from the hostelry, and those who have friends or business in San Francisco are able to live in an establishment which has the very latest equipment and appointments with the best of service, in a city that is noted even in California for its equable climate.

The Hotel Oakland faces the south and is built around three sides of a central floral court, the arrangement of the building being such as to give each of its 450 rooms an outside exposure. Thus the building receives the greatest amount of natural light and warmth possible. The structure is eight stories in height with basement, and above the main floor a wide corridor extends from east to west, and there is another corridor in each wing, which corridors afford easy access to all rooms.

The architecture of the building is Italian Renaissance, and east and west arcades, flanking the main entrance, with their columns, terra cotta urns filled with flowering plants, palms and shrubbery, give a most interesting facade. Two towers rise above the roof of the central portion of the building and flank a loggia, which gives a view of the southern portion of Oakland and the island city of Alameda. The towers themselves offer a range of vision extending from San Leandro clear around the eastern waterfront, along the estuary to the Berkeley city line. The building is faced with glazed brick of a warm yellow tone and topped with a red tile roof, giving a most pleasing effect.

A wide gravel drive sweeps in front of the imposing main entrance of marble and bronze. Running beneath the second floor cornice of the building are a number of inset medallions of stone which offer a relief to the otherwise plain walls, and wrought iron balconies still further aid in breaking the surface of the building. Above the first floor the portion of the building facing the court sets back so as to destroy the usual perpendicular lines that mark the majority of hotel and commercial buildings. Here, above the main entrance and completing the entire sweep of the front above the arcades, is a roof garden, which adds still further to the artistic effect of the facade.

A decided feature in the construction of the building is the manner in which the entire weight of the upper floors has been carried on giant trusses to the supporting side walls, so that columns on the first floor have been rendered entirely unnecessary, save where they have been called into use for decorative effect.

The entire building is of Class-A construction, absolutely fireproof throughout. Bliss & Faville, the architects, have contributed a great deal to the convenience of the traveling public in the thought and study which has entered the designing of the Hotel Oakland.

THE LOUNGE MOST IMPRESSIVE.

Passing through the main entrance into the lounge or reception room, which corresponds to the old-time hotel lobby, one secures their first idea of the magnificence of interior and furnishings which mark the hostelry. This room faces on the central court and through the immense windows, reaching from floor to ceiling, a flood of light enters that accentuates the richness of furniture and decorations. These windows are so arranged that they can easily be opened, and disappearing into recesses provided in the walls, thus throwing the lower floor open as a portion of the floral court.

On warm summer evenings this feature will be greatly appreciated, and will relieve any heat or closeness that might be otherwise experienced.

The marble and mosaic floor of the lounge is covered with hand-tufted rugs specially designed and woven for the hotel and of beautiful color combinations in brown and old blue. The walls of the lounge are of soft gray stone and rise to meet the elliptically vaulted ceiling finished in rich golds, browns and tans, brightened with reds and blues, that gives a richness of finish most pleasing. There are intersecting barrel vaults over the windows and other openings.

Directly facing the main entrance is a tavernelle marble balcony, and there is a mantel and fireplace of the same marble at the eastern end of the room, where a log fire greets the incoming guest.

No hangings have been used on the exterior windows of the lounge, as it is desired to have the natural lighting rather than depend on any artifice during the daylight hours, and the awnings on the outside of the huge windows protect the room from strong sunlight. Hanging baskets of

greenery adorn the walls and windows of the room. The baskets in the windows serve in place of draperies, with the tracery of ferns and trailing plants giving the effect of a conservatory or winter garden.

The chandeliers consist of large flat discs of dull gold and blue, studded with a brighter shade of gold and color lamps. The room is furnished in dark dull finished oak, the special feature being the large tables with black and gold marble tops. All furniture, tapestries, hangings and rugs used on the main floor were designed by W. D. Bliss of the firm of architects which designed the building.

To the left of the lounge in the marble corridor leading from the entrance on the west side of the building to the lounge, is located the clerk's desk.

To the right of the reception room is a writing room that for comfort and softness of design make it one of the most popular in the hotel. The wall covering is of figured velour of a deep blue, with the figured design in beaver, the latter being raised sufficiently to give a texture to the walls. The floor is of highly polished oak, with specially woven rugs, and the ceiling is a most handsome one in a clouded gold effect, low in tone. The cornice is likewise finished in dull gold, and a black marble mantel adds to the richness of the completed effect.

The furniture in this room consists of writing desks for men and women, a large handsome table for magazines and periodicals and chairs. Rugs, furniture, hangings and cushions are in blue and mauve shades. The writing room looks out upon the floral court, and for those wishing rest and quiet it exactly fits the need.

THE BALL-ROOM A FEATURE.

The real feature of the hotel is the magnificent ivory ball-room, the center of the social life of the region lying on the east of San Francisco Bay. Since the opening of the hotel the ball-room has been the setting for a large number of social functions, musicales, card parties and teas, and has been the scene of many brilliant affairs. When engaged for private balls and similar occasions the approach is naturally through the reception room to the ball-room. Both reception and ball-rooms are out of the ordinary, as there has been no gold used in their decoration with the single exception of the chandeliers and wall brackets. This is relief to the fastidious and sets the rooms apart as being something unusual and new in design. There are only two tones of ivory used in walls and ceiling, which are enhanced by the rich hangings of mulberry. The rugs in the reception room are of this same shade. In both wall and ceiling panels there are low relief carvings, as well as on the cornices and columns.

Entering the reception room the guests are ushered to an ante-room, where the men and women part to their respective retiring rooms for the removal of their outer wraps. On their return they meet in the reception room and are greeted by those receiving. This reception room is furnished in dull walnut with settee and chair seats and backs in reed. Mulberry cushions are also used with these same articles of furniture. Two immense pier mirrors set in walnut and gold metal give the women an excellent opportunity of glancing at their gowns before appearing on the ball-room floor. These mirrors are of the Adam period and the gold metal setting drops down over the upper section in a display of moulded ornamentation that is artistic in the extreme.

The ball-room itself is 56 feet wide by 108 feet in length, and is broken at either end by a series of Corinthian columns reaching from floor to ceiling, with sufficient space between them to permit of dancing. These columns serve to shut off those who may be resting, but at the same time allow a perfect view of the dancers.

In the center of the ball-room ceiling is the most gorgeous chandelier in the West, being eight feet in diameter, and of cut crystal and gold finished bronze. It carries sixty lamps. The crystal used was cut in Austria and over 15,000 pieces entered into the construction of the chandelier. There are 10 smaller chandeliers distributed throughout the ceiling and 12 wall brackets. Both lighting fixtures and furniture in the ball-room are of the Empire period in dull gold, with lamp shades and chair cushions in mulberry.

DINING-ROOM A STUDY IN COLOR HARMONY.

Tan, gold and green are the dominant shades in the main dining-room with gold and cut crystal in the lighting fixtures. The wall and ceiling decorations are tan and gold on a background of creamy white with the accentuating green brought out in the carpet. This latter is shaded with brown so as to give an effect akin to that of moss-carpeted floor. The furniture is of Circassian walnut. The chairs have cane backs and seats with loose cushions and valances of green haircloth. The introduction of the green in this room was a daring dash of color, but one which has been so carefully handled that it does not offend, but rather livens the room in a manner which is greatly admired.

The glass screens, set in dull gold bronze, which separate the dining-room and the ball-room from the main corridor, are also used in separating the corridor from the lounge and permit of a great deal of diffused lighting from the floral court on which the lounge faces.

The grill room is considered by many to be the handsomest room in the building, with its high coffered ceiling, wood paneling in watered oak and hangings of figured velours in blues and browns. The ceiling decorations are in dark reds and blues, so soft in coloring that the effect is that of a rich tapestry. The floor is of dark red mosaic.

Relieving the simple wood paneling of the walls are two large tapestries, copies of two now hanging in the Cluny Museum in France, and which represent the siege of Troy. The furniture is of oak with brown leather coverings. The lighting fixtures are particularly good, being of dull gold and outlined in the blues and reds of the ceiling. This grill room is particularly affected by touring parties, as being less formal than the main dining room. "Auto togs" are quite the thing" here.

CLUB-ROOM AN ATTRACTION FOR MEN.

Comfortable and roomy, pleasing to the eye and as attractive as design can make it, is the clubroom and cafe, situated a little below the main floor level in the southwest corner of the building. The walls are of fumed oak, paneled from floor to ceiling, the latter being an ornamented coffered one of the later Renaissance. The floor is of red tile and the windows of stained glass with colored medallion insets. Carved oak columns support the ceiling, and the lighting fixtures are Bacchante heads in dull gold with a large centerpiece representing Pan and finished in dull gold bronze.

The hall and corridors of the first floor are of gray stone with marble trimmings, the floors being mosaic and marble. Gold and blue ornamentation with specially woven rugs in gray, blue and old rose give a pleasing contrast to the mosaic and marble work. The ceiling lights are of frosted glass half globes set in bronze.

The general furniture for halls and corridors is of oak with velour coverings of old rose, blue and gray. The stiffness of the straight lines offered by the walls and floors is broken by terra cotta jardinieres and floral stands filled with potted ferns, palms, plants and shrubs, and the whole effect is one of cool green passageways leading to pleasing vistas of tasteful and richly furnished and decorated rooms.

COMPLETE IN EVERY DETAIL.

On the mezzanine floor are the large sample rooms for commercial travelers, the executive offices and the private banquet rooms. One of these rooms seats 400 persons and another 150 persons. These are so arranged that they can be thrown into one. These rooms are completely furnished and decorated with hangings, floor and wall coverings in harmony.

There is still another smaller banquet room handsomely furnished in old English with heavy dull oak furniture and blue carpets and hangings.

Many individual patterns have entered into the furnishings of the regular rooms, there being 12 carpet patterns and 15 patterns of fine draperies and hangings. All furniture, carpets, hangings and rugs are special designs.

In addition to the regular single and double rooms, with and without baths attached, there are several very fine state suites and many parlor suites or apartments for permanent guests. State and parlor suites have their own individual hallways, which open on the main corridors.

The furniture throughout the hotel is of solid mahogany with the exception of some of the state and parlor suites, where other fine woods have been used in order to carry out special period designs. The suites mentioned are divided among the following periods: Sheraton, Hepplewhite, American Colonial, Louis XVI and Louis XV of the Pompadour design.

The close attention to every detail which might add to the comfort of guests is shown in fitting up the ladies' retiring room in the east wing. This room is fitted up with dressing tables completely equipped with every article for the toilet and large cheval mirrors. The dressing tables are set in front of long panel mirrors extending along one entire wall. Another example of this painstaking care are the crested thermostatic water bottles in each of the living rooms. There is an independent water system which circulates chilled drinking water on every floor. This is drawn off into these water bottles, thereby being kept ice cold at all times.

KITCHEN ARRANGEMENTS UNSURPASSED.

In the culinary department of the hotel there are two separate kitchens and both are fully equipped. The main kitchen is on the first floor between the main dining-room and the grill, givig perfect service to both. There are four service elevators from the basement, which are used in delivering the foods for banquets in the ball-room, the service in the banquet rooms on the mezzanine floor and for extra service in connection with the main dining and grill rooms.

Due to the separate kitchen arrangement in the basement all congestion will be kept away from the regular dining service, even though there be a big banquet in the ball-room and the mezzanine floor rooms are also in use at the same time. Special functions in no wise interfere with the regular patrons of the hotel.

The basement of the hotel covers an entire city block and is almost a city by itself. Here are the mechanical departments of the hotel, butcher shop, store rooms, refrigerator for the storing of meats, fish and vegetables; pastry shops, bakeries, wine cellars, carpenter shop, silver buffing room, baggage rooms, tailor shop, laundry and many other similar departments. There are dining-rooms for the employees, locker rooms and shower rooms for the cooks.

Twenty-four tons of ice in 24 hours is the capacity of the ice-making plant installed in the basement of the Hotel Oakland. This consists of two ammonia compressors with a capacity of 12 tons each, so that the plant, being divided into two units, will not entirely suspend operations in case of breakdown. The ammonia gas passes through these condensors into a pipe condensor and then through a grease extractor before being converted into a liquid. It is cooled during this process and held in a big container before passing into the expansion coils for cooling the brine. These coils surround the brine tank and reduce the temperature of the brine to between six and ten degrees Fahrenheit.

The ice-making machine is divided into 100 compartments, each having a capacity of 50 pounds of ice. These blocks of ice are lifted by a crane and carried to the ice-sawing machine, which cuts them out and they are then stored until needed. An ice-cubing machine cuts up the blocks into two-inch squares for table use, and there are also crushing and shaving machines for preparing the ice for ice cream making and other purposes.

The water used for making the ice is first distilled and then re-boiled, pumped into a pre-cooler, which brings down the temperature to near the freezing point, and is then filtered before entering the compartments in which it is frozen.

After the brine has been used in the ice-making machine it is pumped by a duplicate set of pumps through another brine cooler and is then pumped through the coils in the various refrigerating boxes, there being no ice used for keeping foodstuffs at a low temperature. Some of the brine is utilized in the coils surrounding the tank in which the fresh drinking water is chilled before being pumped through the circulating system to each floor.

The ammonia compressors are steam-operated, while the other machinery used in operating the ice plant is motor driven.

All electric current for light and power is generated on the premises, there being two 100-kilowatt, motor-driven generators for this purpose with a 125-kilowatt Curtis, turbine-driven generator held in reserve. The lighting system of each floor is divided into three sections, and each of the public rooms on the main floor has separate switchboard panels. The wiring throughout the building is the R. C. three-wire system of 110 volts.

Over 6000 Tungsten lamps are used in illumiating the hotel, and include the marquise lights, electroliers and wall brackets on the exterior of the building, and the electroliers over the arcade.

The two generators, which are motor-driven, require a current of 4000. This is the first time that such a high current tension system has been introduced in a public building. The wires are brought in through concrete ducts that absolutely prevent any danger from fire, and the work was installed under special permit from the board of fire underwriters.

The house system of water comes from two sources, one being a well 380 feet below the street level and the other the regular city supply. This water is pumped into a storage tank in the basement, which has a capacity of 30,000 gallons, and then passes through filters with a capacity of 60,000 gallons per hour. From here it is pumped to the roof for that portion of the system that requires an overhead pressure, and the water level is controlled by electrical device. There are two tanks for storing the hot water supply with a total capacity of 15,000 gallons, and the water is kept at 180 degrees Fahrenheit by a thermostatic regulator.

The opening of this hotel on December 23 last was one of the big society events of the year, prominent social and commercial leaders from the section surrounding San Francisco Bay participating. It marked the realization of the dream of those who worked for great things for the City of Oakland, it was a fitting crown to the energy and perseverance of those who made the hotel possible.

Hotel Oakland, Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

Photo by Gilbert Monroe, San Francisco

Lounging Room or Main Lobby, Hotel Oakland
Oakland, California
Wise & Pfeifle, Architects
San Francisco, Calif.

Photo. by Gabriel Moulin, San Francisco

Photo by Federal Studios, San Francisco

Corinthian Columns, which break into end of Ivory Ball Room, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Cal.

Photo by Federal Studios, San Francisco

Ivory Ball Room looking toward Main Dining Room, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Cal.

Photo by Gabriel Moulin, San Francisco

Main Entrance through the Columns of the West Arcade, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, 1913

Photo by Gabriel Moulin, San Francisco

West Arcade Entrance, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, 1913

Photo by Gabriel Moulin, San Francisco

Marble Mantel and Fireplace at east end of Lounging Room, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Cal.

Photo by Gabriel Moulin, San Francisco

Marble Orchestra Balcony in Lounging Room, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Cal.

Photo by Gabriel Moulin, San Francisco

Renaissance Grill, showing tapestries, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

Photo by Sandy Price, Oakland

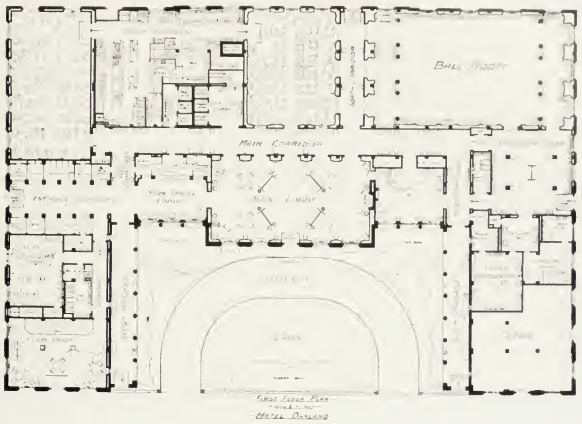
Tap and Gold Dining Room, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

Photo by Gabriel Moulin, San Francisco

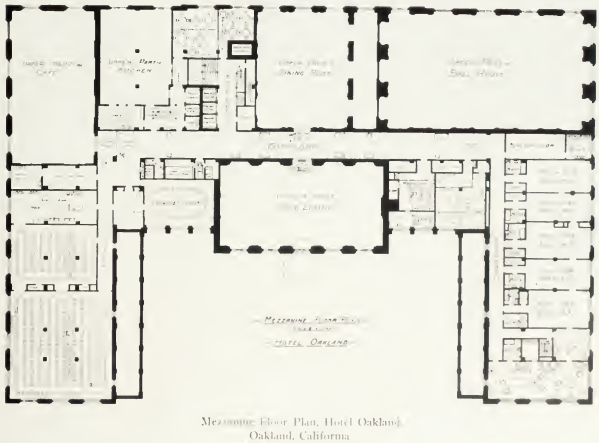
Lounging Room Entrance, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

Photo by Pacific Photo Co., Oakland

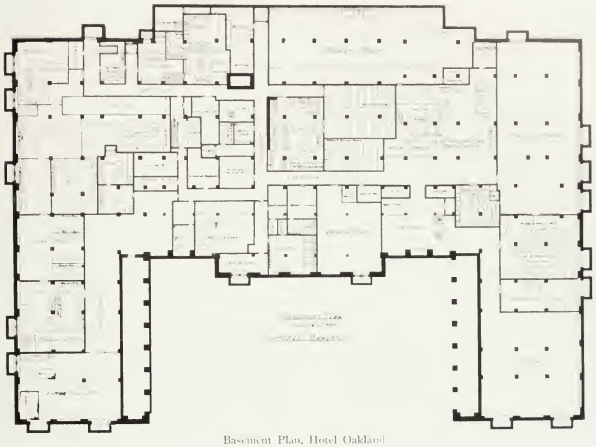
Club Room and Bar, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.



First Floor Plan, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

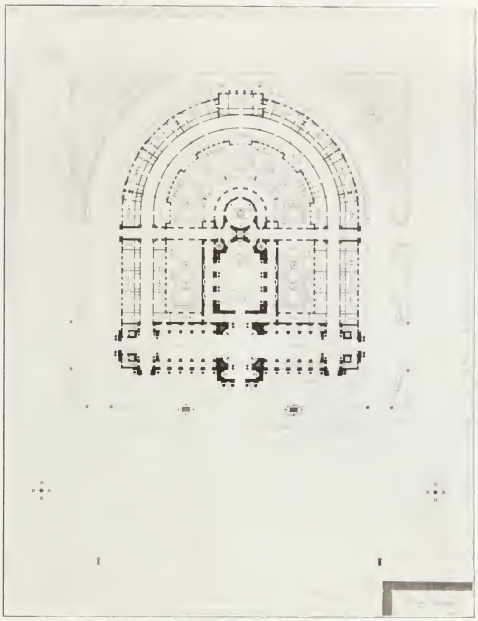


Mezzanine Floor Plan, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.



Basement Plan, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.

Typical Floor Plan, Hotel Oakland
Oakland, California
Bliss & Faville, Architects
San Francisco, Calif.



Chandler I. Harrison, Scholarship Prize. First Medal S. B. A. 9.
Archer, Bowen, Bourgeois.

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1912-1913

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OFFICIAL NOTIFICATION OF AWARDS MADE IN THE JUDGMENT HELD IN SAN FRANCISCO MAY 29, 1913

CLASS "A"—V PROJET.

"A Building for the Supreme Court of the United States."

Author.	*Award.*	*Atelier.*
Chandler I. Harrison,	1st Medal,	Brown-Bourgeois.
Carl I. Warnecke,	1st Medal,	Brown-Bourgeois.
Ernest E. Weihe,	1st Mention,	Brown-Bourgeois.
Thomas E. Kent,	1st Mention,	Brown-Bourgeois.
Fred Kramer,	Mention,	Brown-Bourgeois.
A. I. Rouda,	Mention,	Brown-Bourgeois.
L. Starks,	Mention,	Brown-Bourgeois.
T. L. Pflueger,	1st Mention,	Baur.
C. F. Strothoff,	Mention,	Baur.
W. I. Garren,	Mention,	Perry.
Stafford L. Jory,	1st Medal,	University of California.
Frank V. Mayo,	1st Mention,	University of California.
John Bauman,	Mention,	Portland Architectural Club.

Second Annual Scholarship Prize Given by the Architectural League of the Pacific Coast

The competition for the $1000 prize offered by the Architectural League of the Pacific Coast elicited much enthusiasm on the part of the architectural draftsmen of the Coast.

The much-coveted prize was won by Chandler I. Harrison, a member of the San Francisco Architectural Club. Stafford L. Jory of the University of California was placed second, Carl I. Warnecke of the San Francisco Architectural Club third, and Ernest E. Weihe of the S. F. A. C. fourth.

Thirty-six students made preliminary sketches, 23 from San Francisco, 8 from the University of California, 2 from Los Angeles, and 2 from Portland. Out of these 36 students 13 completed the final drawings.

The program of the competition was a most interesting one, the subject being "A Building for the Supreme Court of the United States." The same program was used for the the "Stewardson Scholarship" offered by the University of Pennsylvania, and also by the Society of Beaux Arts Architects for their Class "A" Projet.

The jury of award consisted of nine members as follows: John Galen Howard, John Reid, Jr., Arthur Brown, Jr., Loring P. Rixford, John Bakewell, John Baur, Warren Perry, J. L. Bourgeois and William C. Hays.

The winner of the prize, Chandler I. Harrison, received his technical training in San Francisco offices, supplemented by the work with the Society of Beaux Arts Architects under the supervision of Mr. Arthur Brown, Jr. He deserves special praise, as his work on the prize drawings was done outside of office hours and mostly at night.

* * *

Japanese Roof Curves

The origin of the Japanese roof curve and the ease with which Japanese carpenters can so accurately construct what their architects design, still continue to puzzle Western architects and those interested in the more difficult phases of building construction, says *Popular Mechanics*. It is freely admitted that the curve of a Japanese temple roof is as difficult a line to draw as man, in his ingenuity, has contrived, but how the Japanese artists themselves succeed so well in reproducing it has never been explained. Modern artists and writers see in these unique and beautiful curves a resemblance to the sagging curves of the primitive tents used ages ago by the forefathers of the Japanese race who dwelt on the burning plains of China, but there does not appear to be any evidence to support such a conclusion. There is no doubt, however, that the curve is a catenary—the most beautiful, perhaps, of all natural curves, formed by gravitation when a chain or cord is suspended between two points.

* * *

Scientific Brick Test Methods

Scientific investigations designed to evolve a thorough and reliable test for brick paving, which, if successful, is expected to completely revolutionize street and road construction work, are being carried on by two seniors in the department of engineering of the University of Washington. These tests are the subject of a graduating thesis which is unique in itself in that it represents a departure from the ordinary methods.

Because of the bearing the final outcome of these experiments has upon the future of road and street building the government is vitally interested in the tests and government engineers have visited the timber testing laboratory where the experiments are being conducted. The two students have obtained the co-operation of a reliable government engineer. Seattle is also interested in the experiments and is furnishing the bricks upon which the tests are being conducted.

The present method of testing brick paving is inadequate, and has often proven inaccurate and unreliable, and therefore if the undergraduates' experiments are successful they are expected to prove an exceptional commercial boon. —*Pacific Builder and Engineer.*

City Planning

City planning and the idea that a city should be planned as an architect does a house or a building was the keynote of the speeches made at the annual dinner of the Philadelphia Chapter of the American Institute of Architects in the Bellevue-Stratford. Although the subject of beautifying municipalities by uniformity in architecture and suitable legislation was the topic of the evening, corrupt and inefficient municipal politics came in for a great deal of attention on the part of Mayor Rudolph Blankenburg, who said that Philadelphia has little to gain by boasting of a city hall that cost $27,000,000 when there are 30-cent politicians in it.

Mayor Blankenburg also said the people of Philadelphia are too provincial in their ideas about insisting on the employment of Philadelphians for important work when better and more experienced persons may be obtained in other sections of the country.

Francis G. Newlands, United States Senator from Nevada, declared that this country was blessed by nature with everything that is beautiful and attractive, but that buildings have been erected that are ugly and abhorrent to the eye.

"Of late years there has been a movement in favor of art," said he, "and all over the country associations of architects, artists, sculptors and engineers have been formed and a federation of arts has brought them into co-operative action.

"They have developed a journalism of their own, devoted to the arts, music, painting, sculpture and architecture, and they have done much to impress the public opinion of the country. Legislation has not kept pace with public sentiment, and political government, whether municipal, state or national, has thus far failed to show full comprehension of the strength of this movement.

"The Burnham plan of Washington, an enlargement of L'Enfant's conception, has been forced upon a reluctant congress by public opinion. City planning has been taken up, and the idea now is growing that a city should be planned just as a house is planned, and not left to an accidental and struggling development. The plans should embrace not merely utility, but beauty and recreation in every form. A backward step was taken by the repeal of congress for the Tarsney act, which provided for the competition of architects in government work.

"It was pushed through in an appropriation bill against the will of the senate and the president in the closing days of the last session as a mistaken measure of economy. The senate stood out against it until the prospect of the failure of the sundry civil bill made the senators yield, and President Taft expressed his dissatisfaction with this provision.

"Such legislation should be reversed by laws so generous and broad as to embrace a department of arts at Washington, which, in co-operation with similar organizations in cities and municipalities, would do much to advance the artistic development of the country. In the legislation providing for such a department, the leadership of great architects and artists should be accepted."

The senator expressed the opinion that if New York City had adopted city planning and uniform architecture several years ago, many of that city's abnormal and eccentric buildings would have been spared. He added that as a Democrat he was hopeful of artistic development under President Wilson's administration because Mr. Wilson is a man of culture and artistic temperament. The speaker predicted that in the next twenty years great strides will be noted in the United States in making art inheritance the enjoyment of all and not the privilege of a favored few.

E. A. Price, a member of the Philadelphia Art Jury, spoke of the work it has done in passing 70 submissions, 50 of which exceeded $9,000,000 in value. Walter Cook, of Washington, president of the American Institute of Architects, urged the adoption of competition among architects working on government work.

* * *

Adaptability of Wood for Many Purposes

Wood, more frequently used than perhaps any other material in house construction, at least in Western America, offers a very wide study. There are a great many varieties of timber used in this country, and they each have certain characteristics which render them especially suitable for use in one building and unsuitable for another.

For heavy framing, such as wooden trusses, girders and posts, a strong timber, and one which can be obtained in large pieces, is required. Georgia pine, Oregon pine, white oak can all be used for such a purpose. Our own Douglas fir is of course popular.

Cypress wood and cedar are best for shingles. For interior finish is chosen a wood which will make a pleasing appearance and which will take a polish, whilst for floors hardness and resistance to wear are the further requirements. For floors oak, hard pine, maple and beech are good, and for the rest of the interior finish any of the hard woods, such as ash, oak, mahogany, chestnut or butternut, are selected.

The toughness and density of wood must be considered in determining the character and size of the details and mouldings.

Hardwoods allow of sharp, thin lines, and therefore of small and delicate mouldings which would be impossible in a softer material. There are also certain kinds of wood, as there are certain kinds of marble, the grain and figure of which is best reserved for decorative purposes and exhibited in boards and panels with simple forms and few mouldings. Timber is generally classified under the headings:

(1) Soft or pine wood, and (2) hardwood or leafwood, these again being subdivided into a great number of varieties. The following principles might be given as a guide to the proper selection of wood:

1. Soft timber having straight grain with slight cohesion between the fibres should be used in straight pieces. Allowance should always be made for shrinkage; panels, for example, need freedom of movement to prevent splitting. Joiners' work should be made and lightly put together long before it is wanted, and should only be glued up finally after the initial shrinkage has taken place.

In constructional work timber may be used under direct compression, tension or transverse stress, but it is not suited to resist shearing along the grain. Where this is unavoidable the joints must be very carefully made.

2. Hardwood having much greater cohesion between the fibres than soft woods, may be used in curved as well as straight pieces. Shrinkage is complicated by the action of the medullary rays, but is generally less than in soft woods.

In constructional work hard wood should always be used where subject to shocks, as in warehouse doors and storey posts. Mouldings may be undercut and carving may be rich and deep, there being ample cohesion to render this possible.

Woolworth Building Greatest on Earth

The highest habitable structure on earth is the Woolworth building in New York. So much interest attaches to this remarkable structure, and so widely known is it, that now it is completed, after two and one-half years' construction work, we will give our readers a description of it.

This building is the most wonderful and marvelous piece of constructive engineering ever conceived or undertaken by man. Nearly 30,000 tons of steel were required in erecting the framework. It is said that not a single steel beam that went into this structure remained on the site of the building an hour after its arrival, before it was put in place. It was all brought to the building site practically on the minute, as it was impossible to store the material in the busy streets of lower New York.

Seventeen million bricks were required in the walls. Over 80,000 electric bulbs are used in the lighting of this structure. Strung less than three feet apart, these bulbs would light the entire 40 miles of water front around Manhattan island.

The building has a total weight of 206,000,000 pounds. The engineers figured that at times this weight is increased by wind pressure to 250,000,000 pounds. It is designed to withstand a wind pressure of about 250 miles an hour, a velocity which, if ever attained, would blow every building off Manhattan island.

No other building since the creation of the earth has reached such a height as 910 feet, which is the height of the Woolworth building from its foundation at bed rock to the top of the tower. The Woolworth tower is 76 feet square and 55 stories high. The roof of the main building is 386 feet above the street. This main structure is 29 stories in height and covers a plot of ground approximately 150 feet by 200 feet.

The building contains 27 acres of rentable office space, and about 13 acres more is taken up with elevators and corridors. There is a battery of 28 elevators, 12 of which serve the tower above the main building. Every safety device known is provided, including air cushions, so that there is absolutely no danger, even though the average tenant will be able to get to his office from the street within 30 seconds. It takes just about one minute to go from the ground floor to the top office floor in one of the express elevators.

Some other features which give an idea of the work involved for the architect to plan the building are as follows: 3000 hollow steel doors, 12 miles of marble trim, 13 miles of plumbing pipe, 7500 tons of architectural terra cotta trim, 28,000 tons of hollow tile, 28,000 tons of terra cotta partitions.

The expression "absolutely fireproof" if often used in connection with the modern office buildings, but is rarely true. In the case of the Woolworth building, however, it is true. There is not a particle of wood in its construction. The doors, partitions and trim are all of steel, terra cotta and glass.

One of the most interesting features of the building is the tower, which contains an immense electric light, and which may be seen for many miles around New York. On the fifty-fourth story is a spacious observatory, which will soon be the Mecca for thousands of visitors of the metropolis of the country.

The exterior of the building is of creamy white stone and terra cotta design, a combination of the Italian, French and modern renaissance throughout the main part, with Gothic steeples at the roof. The grounds and building are said to have cost Frank Woolworth, the owner, about $21,000,000, and experts in New York office building profits affirm that he will never be able to get in excess of 3 per cent per annum on his investment.

Popularity of Terra Cotta

The architectural terra cotta, tile and pottery interests in Chicago are growing in volume and have gained an enviable reputation, says W. D. Gates, secretary of the National Terra Cotta Society. Architects and owners in Chicago have been more insistent for quality of work than have those of other cities, and the result has been that the manufacturers have been stimulated to utmost effort and have made their ware the standard.

The large number of tall buildings erected down town during the last year have been either largely or entirely of terra cotta, and most of them of enameled terra cotta, as also have been the Michigan avenue automobile buildings, the large number of fine apartment buildings and the homes of the city.

This has been occasioned by the imperative need of a material that would wash, a material that would keep clean as long as possible and could at any time be readily cleaned down. The large amount of smoke hanging about the city charged with sulphur gas has, when long continued, a marked influence on building material.

The enamel terra cotta is no more affected by this than is the bottle in which the acid is kept for use in the laboratory or drug store.

The use of the steel skeleton for building necessitates just this kind of covering.

The steel is the bone of the structure and is protected and ornamented by the terra cotta covering. The steel and terra cotta skyscraper, which originated in Chicago, has become famous all over the world. Chicago architects, builders and manufacturers set the pattern for the world, and today their methods influence building methods everywhere.

Architects, builders and manufacturers are beginning to dare to use color. For a long time they held themselves strictly to line and relief work, but they are now adding color, and will more and more and with added effect, and no material lends itself better to this end than terra cotta.

Much use is coming in ornamental work in tiling for exterior use for spots of color and largely for interior work, where it is particularly effective and much more pleasing than any of the other materials there used. It is sanitary, cleanly, beautiful and imperishable. Tile roofing is also largely made here.

Even in art pottery Chicago is coming to have a reputation. The manufacturers, taking as a motto that "nothing is too good for Chicago," have made ware that has been widely and well received. Chicago opened the eyes of the world at the world's fair to the fact that it had art. Its clay workers are and have been active in showing what they could contribute to add to and keep their reputation in this field.

* * *

New Architects

The California State Board of Architecture has granted certificates to practice architecture to the following: William J. Dodd, of the firm of Haenke & Dodd, 113 Story building; Ross Montgomery, 805 Trust and Savings building; Karl Keffer, 2628 Pasadena avenue, Clinton Nourse, 196 West Central avenue, Sierra Madre; and Harry L. Pierce, 551 West Forty-third Place, Los Angeles. C. Curtis Noble, 549 S. Grand avenue, Los Angeles; Mott M. Marston, 532 Laughlin building, Los Angeles; Richard C. Farrell, 105 Currier building, Los Angeles; Jas. D. MacMullen, 940 Ivy street, San Diego.

Another Bed Novelty

President Lawrence Holmes, of the Holmes Disappearing Bed Company, and the inventor of that great modern convenience, has patented and is now manufacturing a new movable upright bed. This may be moved readily to any part of a room, and concealed behind a canopy when not in use. It is unattached, standing on its own base. Hotels and apartment houses, when economy of space is a desideratum, have shown a demand for the new bed. S. B. Cooke, local manager for the company, has the bed on exhibition at the display rooms, suite 422-3-4 Failing building, and invites public examination. Commendable features regarding this bed include the ease with which it is handled, economy of space, sanitariness and absolute safety.

Industrial Publications

"Genuine Economy in Home Building" is the name of a particularly handsome booklet published by the Hydraulic Press Brick Co., of St. Louis, Mo. It is replete with illustrations in color. The covers are printed in shades of red and brown, in similitude to a wall of vari-colored brick, producing a striking effect.

Roofing Tin, the Taylor bulletin for the roofing trade, published by the N. & G. Taylor Co., of Philadelphia, for May, is out. It is an interesting number.

An especially attractive booklet, handsomely printed and entitled "Modern Triumphs in Iron and Bronze," has been issued by the Spokane Ornamental Iron & Wire Works. It shows, among others, the entrance to the Washington High School, Portland, entrance Marquise, furnished Lipman, Wolfe & Co., Portland, and other equipment in this beautiful department store all supplied by the Spokane firm.

Patching Concrete Floors

Signs of dintegration and wear in the surfaces of concrete floors occasionally appear, and various methods have been suggested for repairing them. As would naturally be supposed experiments have developed the fact that there are plenty of wrong ways and only one right way. The ordinary method is to make a cement mortar mixed with sand which is placed in the defective surface, which is generally somewhat cut, and then smoothed down with a trowel. The concrete beneath, being dry, absorbs the moisture in the mortar, the latter fails to "set," the surface generally dries out, and results cannot help but be unsatisfactory. President Leonard C. Wason, of the Aberthaw Construction Company, Boston, recetly wrote a paper on the subject giving directions for the right way to patch concrete floors. He says:

"Cut down the worn place at least one and a half inches. This cutting should be carried into the strong unbroken concrete and the edges should be cleanly undercut. The bottom of the cut should then be swept out, clean—blown out with compressed air or a pair of bellows, if available, then thoroughly wet and scrubbed with a broom. In this way, small loose particles of broken material, which the chisel has driven into the surface are removed. A grout made of pure cement and water about the consistency of thin cream, should be scrubbed into the pores with a broom or brush, both at the bottom and sides of the cut. Following this a stiffer grout, about the consistency of soft putty, should be thoroughly compressed and worked into the surface, which has already been spread with grout. Finally, before the grout is set a mortar made of one part cement to one part crushed stone or gravel, consisting of graded sizes from one-half inch down to the smallest, excluding dust, should be thoroughly mixed and put in place, then floated to a proper surface. Cover with wet bagging, wet sand, sawdust, or other available material. All trucking should be kept off and the surface kept thoroughly wet for at least one week or 10 days.

"If a particularly hard surface is required, six-penny nails are sometimes mixed with the mortar and other nails into the surface when the patch is finished. This will produce a surface which is extremely hard and durable."

How to Make Blue Prints

Although it seldom becomes necessary to make additional prints from a blue print, it is possible to do so provided the original print is first converted into one in which the lines are black and the backgronnd white. The operation to change the color is neither difficult nor does it require a great amount of time. It is merely necessary that the print be immersed in a solution formed of ¾ ounce of ordinary borax dissolved in 6 ounces of cold water. When the print has blackened, it should be removed and washed thoroughly and placed in a solution of ¼ ounce of gallic acid, ¾ ounce of tannic acid and 8 ounces of cold water. This will intensify the color and make the print permanent.

Systematization in Building

Construction Details urges that building, as a trade, should be better systematized in the United States than it is. In England the "quantity surveyor" makes an estimate of all material and labor in a building. He compiles "an itemized list covering every particle of material which is to be included in the building and another bill of what, in England, are called 'labors' which includes detailed statements of all the operations which each craftsman employed must use in order to produce the desired result. If, for instance, bricks are to be laid in an ornamental pattern, the extra work thus involved is carefully considered and estimated accurately. The quantity surveyor's bills go into the most minute detail considering even each mitre in a plaster moulding." The adoption in this country of a similar rule would work advantageously.

A Silicious Wood Preservative

Technical journals have recently mentioned the impregnation of timbers with melted paraffin and naphthalene, but the new Marr process is a great advance on this method. Diatomaceous earth, a silicious material, is ground so fine that ninety-two per cent passes a two-hundred-mesh screen. This is mixed with the melted paraffin and the napthalene and timbers immersed in the mixture for four hours. As compared with the twelve to twenty-four hours required in creosoting, this is noteworthy. Furthermore, it is an open vat process. The wood is permeated to the center and resists the attack of marine borers and decay besides gaining in resilience. Nails hold better and do not rust nor does the wood become waterlogged. Hardwoods like white oak which resist other treatment yield to this preservative. The expense is small, for the mixture costs only three cents per pound and less than two pounds of solution are required for each cubic foot of timber.

Report of Committee on Education, Read Before the Forty-Sixth Annual Convention of the American Institute of Architects Washington, D. C., December, 1912

(Concluded from May number)

We have referred in past reports to the very serious questions of the student, the draughtsman and the junior practitioner in their relation to the profession, and therefore indirectly to the Institute. It is generally accepted that even from the moment when he begins the study of architecture the student should feel, or be made to feel, that he has come into some kind of organic relationship to the whole body of architects, and to their official organization. Just how this should be determined, and on what lines, and how it should be put into practice, are questions which apparently open up an infinite vista of conflicting opinions and warring emotions, and since this committee has been unable after three years to unite on any definite recommendations to the Institute, it proposes this year to make the matter a subject for special consideration at the Educational Conference in the hope that the present nebulous condition may so precipitate itself into a definite and coherent form.

This committee has in recent years swept with nervous fingers the whole gamut of formal architectural education, from the solemn bass of the august schools, through the middle register of the architect and his works, to the shrill treble of the clubs, ateliers and those who are to be benefited by "extension courses," that give aid to the injured draughtsman. We desire now to speak of yet another aspect of the educational question which is of great importance, yet at present almost wholly ignored. From time to time we have referred more or less casually to the fact that while we have the most copious and widespread architectural education to be found in any country, we have practically no agencies for the education of craftsmen. The result must be, and is, extremely injurious, if not fatal, to architecture itself. We may on paper create visions that rival those of Coleridge's Kublai Khan; we may on arising from a weary drawing board, our creative task accomplished, say, with Justinian (and believe ourselves in the saying), "Solomon, I have surpassed thee," but when we see our drawings and our designs materialized in three dimensions we realize that, were we buried within their walls, the globe-trotting New Zealander, a century hence, looking for our personal monuments, would hardly say, with Sir Christopher's eulogist, "Circumspice." In the good old days when an architectural monument was a plexus of all the arts, the architect was pretty much at the mercy of the craftsman, and he still is, with a difference; for then every bit of sculpture or painting or carving or metal work and joinery, and glass and needle work, when these latter came into play, enhanced the architecture, glorified it, and sometimes redeemed it as well; now either our carving is butchered, our sculpture and painting conceived on lines that defy the architecture, our stained glass defiant of every law of God, man or architect, or it is all reduced to a dead level of technical plausibility, without an atom of feeling or artistry, and we are glad enough to take it this way for the sake of escaping worse.

Every architect knows that the success or failure of his work depends largely on the craftsmen who carry it out and complete it with all its decorative features of form and color, and yet in a nation of 100,000,000 people, with a dozen schools of architecture, practically nothing is done towards educating those same craftsmen, and we either secure the services of foreign trained men, accept tenth-rate native work, or go without. Take a case in point: It is decided to build a metropolitan cathedral with little regard to cost; plans are made, what then? If it is to be a great and comprehensive work of art, it needs—and exactly as much as it needs its architect—sculptors, painters, carvers in wood and stone, glass makers, tapestry makers, embroiderers, leather workers. Are there enough schools in America to train all the craftsmen needed on this one monument? Is there one school, and if so, where? One of the foolish arguments against Gothic is that it is quite dependent on artist-craftsmen, and as we have none, we must abandon the style; one of the foolish arguments in favor of Classical design is that anybody can learn to carve an acanthus, therefore we had better stick to what we know we can do. Neither argument is sound. If we have no artist-craftsmen, then it would be better for us to close up half the schools that are turning out architects and employ the funds so saved for the training of the only men who can give lift to the architect's designs.

Apart from the industrial arts in their relationship to architecture, their importance in this country where art manufactures or products are as enormously in demand, is too obvious to need demonstration. Nearly all our expert labor in the artistic trades is imported from Europe. We pay large wages to foreign workmen, but refuse to educate our own people so that this financial benefiting may accrue to them. In other words, our prosperity results in benefiting the alien, and we allow our own citizens to degenerate, furnishing no new employment for the rising generation, but fitting it only for those limited callings which are already overstocked, and in which it can command but a minimum wage.

The lack of industrial art education all over this country is nothing less than shocking, and the elementary nature of that which exists is absurd when compared to the importance. Consider, for example, some of the schools of art industries in Paris. These exist in nearly every category: tapestry, weaving, ceramics, horticulture, landscape

(Concluded on next page)

Advertising on Cement Walks

Wishing to extend a cement sidewalk a distance of three or four blocks to the new fair ground and having no fund for the purpose, the town of Hope, Ark., constructed the extension by selling each outlined block of it as advertising space. A plat was made of the walk showing it divided into numbered squares. A few of the squares were retained on which to place a short history of the town, giving names of prominent men, various industries, population at different dates and the names of county officers at the time, and the remainder were sold for advertising.

In most cases the advertising was done by forming the letters in the top coat before the final set, but a few of the advertisers furnished aluminum letters and numerals about three inches high. Although the sidewalk has now been laid for some time, the outlines of the letters are said to be as plain as when first made.

gardening, etc., but four in particular single themselves out for especial consideration. These are as follows:

Ecole Germain Pilon, producing artists capable of designing and modeling objects to be executed by artisans. It has 115 students, with a budget of $12,000 per annum.

Ecole Boulle, for highly skilled artisans in the furniture trade, with 270 students and a budget of $15,000.

Ecole Estienne, for the several industries of the book and printing trade, with 180 students and a budget of $15,000.

Ecole Bernard Palissy, a school of applied design, with 120 students and a budget of $15,000.

These schools occupy great individual buildings, admirably appointed, and teach every branch of the trade they stand for, the Ecole Estienne covering no less than 17 specialized professions in the printing trade, at an expense to the state of over $350 per student each year. Admission is by competitive examinations, so that the students are of the best type, expensive education not being wasted on incompetent subjects. The boys are admitted between the ages of 13 and 16, the course lasts three or four years and includes a general culture course, as well as courses which are purely technical.

In the very few American vocational schools we have there is usually one class room given to each profession. Bookbinding, which, for example, at the Ecole Estienne is developed into several separate professions, here occupies one room, where the same student is supposedly taught everything knowable in the art in the space of a year or two, and then sent off to command wages one-half those paid workmen imported from France or Germany.

Now, in comparison, and considering only the question of those two branches of work most intimately associated with architects, decorative modeling and painting, what is offered, for example, by New York?

The decorative modelers' trade is governed by a society calling itself The Modelers and Sculptors of America, of which the local branch in New York has 250 members. These are almost exclusively foreigners, a fact significant in itself. The pay varies from $35 to $60 per week. The society admits only a limited number of apprentices, we believe not more than fifteen or twenty at any given time. These apprentices are supposed to pick up what they can learn at the shops during four years, after which they must become journeymen. As they rarely do pick up very much during this time, they discover that they are unable to obtain work at the end of their apprenticeship and have to give up the trade, thus having wasted four years. The only means of instructions for those boys are afforded by Cooper Institute, Pratt Institute, the Mechanics' Institute and the Sculpture Studio of the Society of Beaux Arts Architects.

The first three of these institutes give the boys simply practice in modeling and drawing from casts; the fourth is this year endeavoring to train them in a knowledge of classical orders, the various styles of modern ornament, the study of natural forms and original composition of ornament.

Praiseworthy as these efforts are, they are insufficient. No boy, to grow into an intelligent workman, can abandon all studies at 14 and enter a shop. He must continue his course of general studies while learning the elements of his craft; therefore, a school is necessary until he is at least 16. Again, these classes are so overcrowded that the student can come only every other day, while the system of copying casts, stupefying as it is, cannot be productive of good results.

The decorative painters form a part of the general painters' union, which in New York is divided up into locals by nationalities; the German local, containing about 1,200 journeymen, is said to have the highest standard, and at one time it had some form of instruction for its members. What this was we are unable at present to find out, but now it has been abolished altogether.

We are told that there is not one American-born journeyman doing commercial painting.

Now if all this is true of architectural modeling and painting it is at least equally true of the other arts, such as wood carving, the making of stained glass and metal work of all kinds. Obviously little is done educationally in any of these directions, and as a consequence when we want really good work we go abroad for it or employ foreign-trained men who have taken up their residence in this country. Some time ago a member of this committee was asked to give a list of artist craftsmen who were competent in design and execution, and who were willing to work with due regard to the architectural environment of their products. He reported that there were two Americans who were doing well as beginners in stained glass, but that it would be safer to go to England, where the ancient tradition in design and workmanship still maintains in a measure. He named two good sculptors in wood, one a Bavarian, one a German; one admirable iron-worker, a German; one goldsmith, an Englishman, and two architectural sculptors, one a Welshman, the other American.

Of course, this is all wrong. There should be an hundred craftsmen in each category, if architectural dreams are to be properly materialized and embellished, and these should be our own people, not imported aliens, however competent they may be.

It should be understood that we are not referring to the sculptor and the painter as architectural allies; we have great men in both categories and their relationship to the profession was considered by the Committee on Allied Arts of last year. We are speaking of the craftsmen whose work enters more intimately into ordinary architectural practice, and so speaking we do not hesitate to say that the present state of things in America is barbarous, uneconomical and in a degree discreditable to the architectural profession.

We do not suggest a remedy. We have none to offer. We beg to call attention to a condition, and to urge each architect individually and each Chapter collectively to consider the situation very seriously, and to do everything possible to remedy a crying disgrace. There are two things that might be done, one by the architect, the other by the Chapters: The architect might and should exclude from his general contracts everything that calls into play artist-craftsmanship (as many do even now), such as art-metal work of all kinds, stone and wood carving, tiles, mosaic, leaded glass, and then endeavor to place this work in the hands, not of great organizations, but of individual craftsmen. The Chapters might, through committees, interest themselves in local trades schools, offering their assistance to the teachers, giving perhaps small prizes for meritorious original work, and where there are no classes for the teaching of some particular craft, they might be influential in organizing a class in some definite field.

Neither of these suggestions goes to the root of the matter, of course, for this lies much deeper than may be reached by any such panaceas, but something must be done, and in default of better, we proffer these suggestions.

Respectfully submitted,

RALPH ADAMS CRAM,
EMIL LORCH,
LLOYD WARREN,
C. C. ZANTZINGER,
WM. S. PARKER,
Committee on Education.

The Parrott Automatic Gas Water Heater

The Michigan Gas Appliance Company, manufacturers of the Parrott Automatic Water Heater, has opened offices with a demonstrating machine at 127 Alder street. The heater is the smallest made in the way of an automatic heater, yet it produces a large flow of hot water at a very low running expense. The Parrott heater fills a long-felt want in a finely constructed machine, which is low in initial expense and maintenance.

Personals and Trade Notes

Architects Root & House have moved their offices from 410 Commercial Club Building to 100-1-2 Yeon Bldg.

Architects Cummings & Morcom have opened an office in the Finch Block, Victoria, B. C.

Architect W. S. Duncan has moved from 224 Vernon Drive to 812 Robson Street, Vancouver, B. C.

Hunter & Hudson, Engineers, San Francisco, have moved their office from 328 Rialto Building to 729 same building.

Architect H. C. Ferrey, Victoria, B. C., has moved from the Union Club Building to temporary quarters at 220 Sayward Building.

Lewis & Lewis, Architects, formerly at Twenty-second and Upshur Streets, have opened offices at 211 McKay Building, Portland, Ore.

Earl A. Cash, formerly a draftsman with the Hurley-Mason Co., is now with Architect Julius A. Zittel, of Spokane, Wash.

Architect W. T. Whiteway has moved his offices from The Molson's Bank Building to 1400-01 World Building, Vancouver, B. C.

W. E. Dennison, of the Steiger Terra Cotta & Pottery Works, San Francisco, has returned from a business trip to Southern California.

Architect Geo. H. Wenyon, 301 London Building, Vancouver, B. C., has departed for London, Eng., where he will engage in his profession.

Architect J. R. Ford, of Eugene, Ore., was a recent visitor in Portland. While in Portland, Mr. Ford was inspecting apartment house construction.

Architect C. A. Meussdorffer, with offices in the Humbolt Bank Building, San Francisco, has returned from spending an outing in the Yosemite Valley.

O. G. Hughson was recently appointed financial secretary and manager of the Builders' Exchange, to fill the vacancy caused by the resignation of L. F. Danforth.

Mr. Lilley, of Lilley & Thurston Co., dealers in building materials, with offices in the Rialto Building, San Francisco, is on an extended trip east.

C. M. Lovsted, treasurer of the Spokane Ornamental Iron & Wire Works, of Spokane, Wash., was a recent visitor in Portland, transacting business for his company.

The Denny Renton Clay & Coal Co., Seattle, Wash., has been awarded the contract for brick sufficient to pave 6000 feet of roadway in Kittitas County, near Ellensburg.

H. G. Ellis, a Spokane architect, spent a few days in Portland looking over the Union Stock Yards for Spokane capitalists, who expect to build similar yards in that city.

Milo S. Farwell, formerly a draftsman in the employ of Architects Knighton & Root, of Portland, has been a practicing architect in the city of Victoria, B. C., for the past year.

Architect Frank Wilson Young, junior member of the firm of R. B. Young & Son, Los Angeles, Cal., is on an extended trip through the east, and expects to be gone about a month.

J. A. Fouilhoux, of the architectural firm of Whitehouse & Fouilhoux, has been appointed on the committee to redraft the building code of Portland. He replaces Ion Lewis, who recently resigned.

Architects Chas. Haynes & Alexander A. Cantin have formed a partnership and have opened offices in the Mehlhorn Building, Seattle. They were formerly partners in San Francisco, before the fire of 1906.

The Washington Brick Lime & Sewer Pipe Co., of Spokane, Wash., will furnish the buff terra cotta and the granite colored brick, which will be used on the third unit of the Washington State Reformatory at Monroe.

The Western Builders Supply Co., Inc., San Francisco, is now situated in its old location before the fire, 155 New Montgomery Street. This firm is one of the pioneer manufacturers' agents and jobbers in San Francisco.

Architect John Parkinson, of the firm of Parkinson & Bergstrom, Los Angeles, is on an extended European trip. Mr. Parkinson expects to be away two or three months. While away he will visit his birthplace at Bolton, England.

The Pratt Building Material Co., with offices in the Hearst Building, San Francisco, is a new concern carrying a general line of building materials. C. F. Pratt, well known in California building circles, is at the head of the new firm.

The terra cotta on the eleven-story Insurance Exchange Building, San Francisco, was furnished and erected by Gladding, McBean & Co.; the terra cotta setting started on April 20 and was completed June 4, being three weeks ahead of schedule.

Clinton Nourse, formerly of Des Moines, Iowa, and Karl Keffer, of New York City, have opened offices for the practice of architecture in the Story Building, Los Angeles, Cal., under the firm name of Nourse & Keffer; manufacturers' samples and catalogs desired.

C. H. Weilder, local manager of The Tnec Co., has secured the contract to replace the high vacuum plant in the new Broadway Building with one of the Tnec's plants. He has also received the contract to install a residential plant in the new home of W. C. Bristow.

The Pacific Face Brick Co. has finished the delivery of brick on the Foster & Kleiser theater on Sixth Street. Other buildings on which delivery is now being made are the Wassell Apartments; Fritz Building; Rose City Importing Co.'s building, and the Platt & Platt Building.

J. Braida & Co., through their local representative, Wm. Frese, secured the contract for 20,000 square feet of terrazo flooring in the Morgan-Bushong Building. Other recent contracts secured by Mr. Frese are for 70,000 sq. ft. in the McLeod Building, Edmonton, and 30,000 sq. ft. in the Strathcona Hospital near Edmonton.

The Holmes Disappearing Bed Co., through their local manager, S. B. Cooke, secured the contract to install seventy-seven concealed beds in the R. F. Wassell Apartment House on East Thirteenth and Morrison Streets. The same company also secured the contract for the installation of fifty disappearing beds in the Dr. Wood's Apartment House on Tenth and Hall Streets.

A Resume.

PORTLAND.

Church—Architects Tourtellott & Hummel have been commissioned to prepare plans for a church building for the First Methodist Church. The building will be of classic design, 100x150 in size, and cost about $100,000.

Business Block—Architects McNaughton & Raymond prepared plans for a two-story brick business block, to be erected in Eugene for Flint-McLoughlin Furniture Company.

School—Fred A. Legg and George Kingsbury, associate architects, prepared plans for a $30,000 school to be erected in Camas, Wash. The building will be two-story brick, reinforced, and have twelve class rooms.

Business Block—Architects Doyle & Patterson have been commissioned to prepare plans for the building to be erected on the Pittock Block for the Northwestern Electric Company. The building will cost $1,000,000, and will be eight stories high, 200x200 in size, and of fireproof construction.

Residence—Plans for a two-story, ten-room colonial residence, which will be erected for L. M. Courtney at a cost of $5000, were prepared by Architect J. C. Atkins.

Residence—Architect R. N. Hockenberry is preparing plans for an eight-room, two-story colonial residence with brick and plaster exterior, for Dr. A. J. Brock, to be erected at a cost of $8000.

Remodeling Church—Architects Emil Schacht & Son prepared plans for remodeling the St. Johns Catholic Church, of Oregon City. The improvements will cost about $3000.

Residence—Architect Ernst Kroner prepared plans for a modern seven-room country home, to be erected for himself, at his country place near Tigard.

Residence—Plans are being prepared by R. N. Hockenberry for a two-story, eight-room semi-colonial residence, to cost $7000, for Dr. L. L. DuBoise.

Church—L. R. Bailey Co. prepared preliminary plans for a $15,000 church to be erected for the Rose City Park Presbyterians.

Residence—Architect H. C. Dittrick prepared plans for a ten-room frame residence, to be erected on Portland Heights for M. A. Ashley, at a cost of $12,000.

Bungalows—Butterworth, Stephenson Co. prepared the plans for a $3000 bungalow to be erected at Primrose Acres for T. A. Moore. The same company also prepared plans for a bungalow to be erected for Dick Deitrich at Glenn Harbor.

Residence—Plans were prepared by Architect Earl A. Roberts for an eight-room Swiss chalet, to cost $4000, for Wm. Bechtold.

Apartment House—Architect A. C. Dittrich prepared plans for a two-story frame apartment house for D. O'Connell, to cost about $12,000.

Residence—Architect R. N. Hockenberry prepared plans for a two-story frame residence, to cost $6000, for H. S. Johnstone.

Residence—Plans have been prepared by Architects Jacobberger & Smith for a nine-room residence to be erected in Alameda Park for J. H. Gilpin, at a cost of about $10,000.

Factory—Architects Jacobberger & Smith prepared plans for a two-story addition, 66x85, to the Doernbecher Manufacturing Company's plant, to cost $7500.

Residence—Plans were prepared for a two-story frame residence by Architect Arthur J. Maclure, to be erected for Mrs Bertha D. Johnson, of Middleton, Ore.

Garage—Architect O. N. Pierce prepared plans for a one-story concrete garage to be erected for James Kelly on Williams avenue and Failing street.

Store Building—Architect Wenzel Fritsche prepared plans for two buildings to be erected on Hawthorne avenue for F. M. Barnes; one will be a two-story frame store and apartment building, to cost $17,000, the other will be a reinforced concrete theatre building, to cost $10,000.

Business Block—Architect Aaron H. Gould has prepared plans for a four-story brick building to be erected for R. F. Ryan in Salem. The building will be 105x165 in size, and will cost about $80,000.

Library—Architects Sutton & Whitney have been commissioned by the Library Board at Hood River to prepare plans for a modern brick library to cost $17,500.

Gymnasium—Architect Newton C. Gauntt prepared plans for a one-story frame building, 46x60, to be erected by the Yacolt School District.

Business Building—Architect Earl A. Roberts is preparing plans for a one-story brick building to be erected for James Newland, of Roseburg, Ore., at a cost of about $5600.

Residence—Plans were prepared by Architect H. M. Fancher for a residence to be erected on Arlington Heights at a cost of $3500.

Residence—Architect John Wilson prepared plans for a $3000 residence for C. H. Watzek, to be erected at Wauna, Ore. Mr. Wilson also prepared plans for a $3000 residence to be erected at Juneau, Alaska, for B. D. Stewart.

School—Architect Wayne L. Mills prepared plans for remodeling and the construction of an additional story to the Linnton School Building, to cost $4500.

Masonic Building—Architect E. E. McClaran has been commissioned to prepare plans for a Masonic building to be erected in Tillamook, Ore. The building will be a two-story pressed brick, 78x105, and will cost approximately $25,000.

College Buildings—Architects Bennes & Hendricks have been commissioned to prepare plans for buildings to be erected at the Oregon Agricultural College. There will be a three-story brick building, to cost about $60,000, and a gymnasium 175x150 feet in size. The total cost of the work will be $135,000.

Store Building—Architect A. C. Ewart prepared plans for a one-story brick store building to be erected on Front and Columbia streets for Senator Mulkey.

Theatre—Plans were prepared by Architect Arthur J. Maclure for a one-story moving picture theatre to be erected at Canyon City for H. L. Kuhl at a cost of $3000.

OREGON.

Business Block—Corvallis. C. D. Darst will erect a one-story concrete business block, 25x100.

Storage Plant—Medford. The Rogue River Fruit & Produce Association has decided to erect a $40,000 cold and dry storage plant this summer.

Church—Monmouth. The Christian Church has decided to build a $4000 church building.

Lodge—Albany. Architect Charles H. Burggraf prepared plans for a $30,000 building for the Knights of Pythias. The building will be two stories, 100x130, of brick construction.

Garage—Silverton. S. K. Bergland will begin work at once on a garage, 28x60 in size.

Theatre—Pendleton. C. F. Colesworthy will erect a modern theatre building with a seating capacity of 600, at an approximate cost of $10,000.

Lodge Building—Mapleton. The Odd Fellows have awarded the contract to Jack Gilmore for the construction of a $4500 lodge hall.

Lodge Building—Troutdale. The Masonic Lodge will start work about June 15 on a lodge building.

School—Springbrook. Plans have been prepared for a $5000 school building to be erected by school district No. 56, Yamhill County.

Business Buildings—Juntura. Work has been started on a two-story stone building, to cost $20,000, for William Jones and H. J. Hoffman. Other buildings to be started at once are a 40-room two-story stone hotel, 100x120, for H. B. Courtney; a two-story stone building, 50x100, for M. V. Hart, and a two-story stone building, 55x125, for Irving Honold.

Garage—Condon. Work has been started on a garage, 40x84, being erected for Dr. L. L. Taylor.

Business Block—Salem. R. T. Ryan announces that he will erect a modern four-story brick business block. The building will be 105x165, and will cost about $75,000.

Hotel—Carlton. Architect E. N. Larry, of McMinnville, has been commissioned by A. D. Brooks to prepare plans for the construction of a two-story brick hotel building.

School—Coquille. The Coquille school district has purchased property on which to erect a school building in the near future.

WASHINGTON.

School—Tacoma. Architects Heath & Gove prepared plans for a five-room brick school building, to cost $20,000.

School—Spokane. School Architect Robert C. Sweatt is preparing plans for a four-room brick and concrete school building, to cost about $20,000.

Public Buildings—Sedro-Woolley and Monroe. Architects Saunders & Lawton, Seattle, are preparing plans for $400,000 worth of buildings to be erected at the State Reformatory at Monroe and the Insane Asylum at Sedro-Woolley.

Apartment House—Seattle. Architect James H. Schack has prepared preliminary plans for a six-story apartment house, 120x180, for Bogue & Brown, to cost $325,000.

Hotel—Tacoma. Plans have been started by Heath & Gove for a 16-story hotel building, to be erected for the National Realty Company, at a cost of $600,000.

Hotel—Auburn. Architect V. W. Voorhees, Seattle, is preparing plans for a three-story brick hotel, to cost $20,000 for W. W. Downing.

School—Ephrata. Bonds for $25,000 have been voted with which to erect a modern two-story brick school building.

Lodge Building—Ellensburg. Architect Crawford has completed plans for a three-story building for the I. O. O. F.

Bank—Castle Rock. Beezer Bros. prepared plans for a two-story concrete and brick building for the Castle Rock Bank, to cost $35,000.

School—South CleElum. Architects Stephens & Stephens, of Seattle, prepared plans for a two-story four-room brick school building, to cost $8000.

Business Block—Coulee City. W. L. Box will start work at once on a two-story concrete and brick store building.

School—Wilson Creek. Bonds for $20,000 have been voted with which to erect a high school building.

Stock Yards—Spokane. Architect H. G. Ellis has been commissioned by W. D. and J. H. Roberts to prepare plans for a stock yards and the necessary buildings.

School—Colfax. Architect William Swain, of Pullman, has been commissioned to prepare plans for a four-room addition to the North Ward School, to cost $10,000.

Warehouse—Mondovi. The Washington Grain & Milling Company will erect a reinforced concrete grain warehouse.

Residence—Seattle. Architects Saunders & Lawton are preparing plans for a $15,000 residence for A. Hambach.

Warehouse—Seattle. Architects Saunders & Lawton have been commissioned to prepare plans for a four-story concrete and steel warehouse, 80x119, for A. Hambach, to cost $150,000.

Lodge—Bremerton. The Order of Eagles will erect a three-story reinforced concrete building at a cost of $20,000.

Pavilion—Moclips. Architect C. E. Troutman, Aberdeen, prepared plans for a pavilion, 75x175, to be erected by the West Coast Company.

Country Homes—Spokane. Architect Herbert E. Smith is preparing plans for ten country homes to be erected for the Country Home Development Company at a cost of from $3300 to $7200 each.

Business Block—Leavenworth. Paul Weigand is having plans prepared for a one-story brick business block, 80x105.

Church—Tacoma. Architects Heath & Gove are preparing plans for a $20,000 church for the McKinley Park Methodists.

Store Buildings—Tonasket. Architects Keith & Whitehouse, Spokane, are preparing plans for a reinforced concrete store building, to cost $15,000, for C. E. Blackwell.

Apartment House—Seattle. Hans Pederson prepared plans for a three-story frame apartment house, to cost $40,000.

Residence—Seattle. Architect Ellsworth Storey prepared plans for a $5000 residence to be erected for R. N. Evans.

Yacht Club—Seattle. Architect John Graham has prepared plans for a two-story club house, to be erected on Bainbridge Island, for the Seattle Yacht Club.

School—Ione. Architects Sweatt, Levensque & Co., of Spokane, have been commissioned to prepare plans for a $15,000 reinforced concrete school building of six rooms.

City Hall—Colfax. At a meeting of the city council it was decided to build a city hall, to cost $12,000.

Residence—Seattle. Architects Bebb & Mendel have been commissioned to prepare plans for a three-story residence for Mr. Blaine, to cost $100,000. The same architects have prepared plans for a two-story warehouse for the Wenatchee Fruit Growers' Exchange, to cost $150,000.

Business Block—Everett. G. Nichlason will erect a two-story brick building, to cost $20,000.

Warehouse—Seattle. Sears-Roebuck Company is having plans prepared for a nine-story addition to their building. The building will be 120x120, of reinforced concrete construction, and will cost about $1,000,000.

Store—Kent. Architect John W. Dow, Spokane, prepared plans for a $15,000 store building, to be erected for Berlin Bros.

Apartment House—Seattle. Architect James Schack prepared plans for a three-story brick veneer apartment house for C. D. Stimpson, to cost $35,000.

Commissary—Hillyard. The Great Northern Company will build a commissary building, 30x100 in size.

Warehouse—Tacoma. Architect S. C. Irvin prepared plans and let the contract for a six-story concrete warehouse, 80x100, for the Tacoma Grain Company, to cost $60,000.

School—Stanwood. Plans were prepared by Architect G C. Kennedy, of Everett, for a brick school building.

IDAHO.

Store—Kellogg. E. P. Webber will erect two concrete store buildings at a cost of $6500 each.

Hotel—Kellogg. J. D. Conell will erect a twenty-room brick addition to a three-story hotel building.

School—Grangerville. Jack Turner has the contract to erect a two-story concrete and brick school building having 14 rooms.

School—Priest River. Bonds for $15,500 have been voted with which to erect a modern school building.

SAN FRANCISCO.

Synagogue—Architect G. R. Lansburgh has plans completed for a synagogue for the First Hebrew Congregation of Oakland. The building will be a steel frame structure faced with stone and terra cotta.

Garage—Plans have been completed by Architect Willis K. Polk & Co. for a reinforced concrete garage to be erected in Oakland for Cuyler Lee at a cost of $45,000.

Business Block—Plans for the Chas. C. Moore building have been completed by Architect Nathaniel Blaisdell. The building will be two-story, 115x80.9 feet and will cost $8000.

Church—Architect Wm. A Newman has been commissioned to prepare plans for a $7000 church and parish house in Oakland.

Factory—Architect Smith O'Brien completed plans for a three-story mill construction factory building for the C. H. Workman Packing Company, to cost $45,000.

Hotel—Architect F. D. Voorhees is preparing plans for a seven-story steel frame store and hotel building, to be erected at a cost of $100,000, for H. A. Powell.

Office Building—Plans are being prepared by Architect Norman Coulter for an eight story bank and office building to cost $200,000.

Apartment House—Architect C. W. Dickey is preparing working drawings for a three-story $60,000 frame apartment for B. F. Durphy.

Commission House—Plans are being prepared by Architect Wm. H. Crim for a one-story reinforced concrete commission house.

Residence—Architect Wm. H. Weeks is preparing plans for a $20,000 country residence to be erected near Los Gatos for M. A. Laveaga.

Business Blocks—Architect O. G. Traphagen has been commissioned to prepare plans for a four-story steel frame business block to be erected in Honolulu at a cost of $500,000.

Theatre—Architect G. A. Hansburg has started plans for a Class A theatre building to be erected for the Orpheum Amusement Company at a cost of $300,000.

Church—Plans were prepared by Architect Ed. V. Fonkes for a $30,000 steel frame church building to be erected for the Baker-field Congregational Church.

Town Hall—Architect Wm. H. Crim, Jr., has been commissioned to prepare plans for a $10,000 town hall at Los Gatos.

Residence—Architect Henry C. Smith has completed plans for a $45,000 brick country residence for J. J. Graves.

Apartment House—Preliminary sketches are being made by Architect G. W. McCall for a six-story apartment house for Major McClenahan, to cost approximately $60,000.

Residence—Architects Bakewell & Brown are preparing plans for a two-story frame residence for Horace Miller, to cost $20,000.

Residence—Architect Henry C. Smith is preparing plans for a $30,000 country residence to be erected near Redwood City.

BRITISH COLUMBIA.

Hotel—Victoria. Architect Jesse M. Warren is preparing plans for a six-story mill construction hotel for the Victoria Phoenix Brewing Company. Mr. Warren is also preparing plans for a two-story store and apartment house for R. Randell, to cost $15,000.

Hotel—Vancouver. Architect Emil Gunther has completed plans for a ten-story reinforced concrete hotel building, to cost $200,000. The same architect has also completed plans for a six story reinforced concrete hotel building, to cost $100,000.

Apartment House and Hotel—Victoria. Architect Mahon S. Farwell is preparing plans for a four-story apartment house, to cost $65,000.

Apartment House—Victoria. Architect Samuel Maclure prepared plans for a four story apartment house, to be erected at a cost of $50,000.

Laundry.—Vancouver. Architect G. R Kuhlman prepared plans for a three-story reinforced concrete laundry building, to cost $125,000.

Residence—Victoria. Architect A. W. Milner, Seattle, is preparing plans for a three-story stone and stucco residence for W. A. Lewthwaite, to cost $40,000.

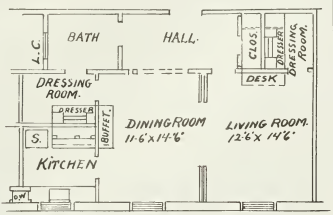
Store and Rooming House—New Westminster. Architect J. F. Watson has prepared preliminary plans for a six-story reinforced concrete building, to cost $100,000.

Hospital—Vancouver. Architect A. Cox has completed preliminary plans for an isolation hospital, nurses' home and an addition to the Vancouver General Hospital. The buildings will be of brick construction, and will cost $[illegible].

Theatre—Vancouver. Architect J. J. Donnellan is preparing plans for a fireproof theatre building, to cost $150,000.

Apartment House—Victoria. Architect J. J. Donnellan is preparing plans for a five-story, 116x185 apartment building, to cost $200,000.

Theatre—Victoria. Plans are being prepared by Architect J. J. Donnellan for a fireproof theatre building of steel and concrete construction, 90x120 in size, to cost $[illegible].



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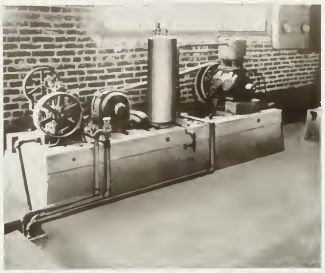

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THE PACIFIC COAST ARCHITECT

A·MONTHLY·JOURNAL·FOR·THE ARCHITECTURAL · INTERESTS

SAN FRANCISCO
CALIFORNIA

VOLUME FIVE
NUMBER FOUR

JULY, 1913

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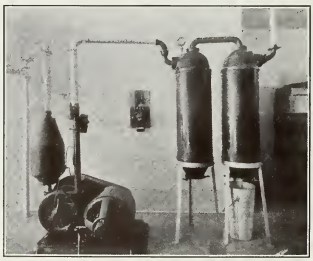

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Single copies, each 50 cents.

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Changes in copy for new advertisements must reach the office of publication not later than the Twentieth of the month preceding issue.

The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is sought of this may should be stated. Self addressed envelopes must accompany all such contributions.
ADVERTISING RATES ON APPLICATION TEL. DOUGLAS 2324

Current Comment

When economy of space is required in a small house, the bathtub may be placed beneath the floor, covered by trap doors when not being in use.

◇ ◇ ◇

A mixture of dry Venetian red in gum arabic mucilage, to the consistency of putty, makes an admirable filler for fine cracks in mahogany.

◇ ◇ ◇

Wire mesh netting, such as is used in concrete reinforcement, is now being applied in concrete pavements and roadways as a binding medium.

◇ ◇ ◇

Steel needles are now used to perforate the surface of wood to be treated with creosote. They penetrate to the distance of an inch.

◇ ◇ ◇

Rolling doors of solid concrete, eight in number, are employed in the new station of the Boston Elevated Railway at the Harvard athletic field.

◇ ◇ ◇

City authorities at Glendale, Calif., have erected circular concrete guard walls around trees in the residential portion of the city to protect them from traffic and eliminate the necesssity of cutting them down.

◇ ◇ ◇

A house constructed most of steel, with concrete foundations and floor, has been designed for the tropics. The little wood used is chemically treated to resist insects. The framing of steel is filled in with mosquito netting, between perforated metal sheets to prevent bulging. It is an ideal mosquito and storm-proof dwelling.

A door hinge with wedge-like parts has been invented. As the door opens it is raised clear of the floor by ¼ of an inch, doing away with the necessity of thresholds.

◇ ◇ ◇

There is an odd piece of furniture in the office of a brick company at Long Beach, Calif. It is a center table made entirely of brick. Buff-colored glazed brick constitute the top, while the legs are of fire brick.

◇ ◇ ◇

The County Court at Lakeview, Oregon, has appropriated money for a concrete bandstand that will mark an advance in the architecture of such structures. It will be semi-octagonal in outline and an amphitheater in arrangement.

◇ ◇ ◇

W. D. Foss, of Centralia, Wash., has invented and patented a preparation for curing wood so that it will withstand the elements. Mr. Foss is president of the Centralia Wood Preserving Company, recently incorporated, which will manufacture the new compound.

◇ ◇ ◇

Vancouver, B. C., Architects Elect Their Officers

The following list of officers were elected at a special general meeting of the Vancouver Chapter of the B. C. Society of Architects held on May 22, under clause 5 of the chapter by-laws:

President, W. F. Whiteway; vice president, J. L. Furnam; hon. secretary, W. T. S. Hoyt; hon. treasurer, W. M. Dodd; members of council: J. C. Day, F. G. Gardiner, L. Simmichsen, C. L. Thompson, G. A. Birkenhead, E. A. Hoyt, R. J. MacDonald, Robert Lyon, J. G. Lefbed and J. D. Pearson.

◇ ◇ ◇

Suggests More Publicity for Architects and Engineers

At one of the recent regular weekly luncheons of the Portland Technical Club, Marshall N. Dana, a local newspaper reporter, explained the manner in which news is gathered and handled in newspaper offices. Mr. Dana made the suggestion that architects and engineers ought to give more publicity to their professions. He believed that if proper explanations were given on public work, difficulties would be eliminated or at least minimized. He also thought that the technical men of the city should devote more attention to civic improvements of a local nature.

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Day by day, week by week, month by month a new chapter of progress is written in indelible records of stone and steel.

The city grows and expands in every direction. The hammer of the builder is everywhere, every day, beating chimes of prosperity. It is the heart of summer and there is no lessening in the activity of new construction.

June has gone, leaving in its trail a new record, a convincing, significant demonstration of what is being done—nearly two and a half million dollars worth of new building in its thirty days.

June's record brings the total value of building work done in the first six months of the year up to the tremendous total of $16,221,001. This is an increase over the first six months of 1912 of $2,038,580.

Such a remarkable record after ten years of building activity unequaled in the history of cities, ten years during which this city has seen the erection of $200,000,000 worth of new buildings, is the best possible proof of the stability of the city's prosperity.

The figures for June building, taken in conjunction with what has been done by San Francisco since the fire, become powerfully significant.

They show that the city has not run out of money or credit. With a loss the greatest in the history of the world, the city came back with rebuilding operations that have amounted to over $235,000,000 since April 18, 1906. For two years after the fire structures erected cost from 25 to 35 per cent more than the original contract price. Since then the work has cost from 10 to 15 per cent more than the contract price, which brings the estimated totals of rebuilding up to $290,000,000, or as much as it has cost the Federal Government to build the Panama Canal.

Nor has it apparently staggered the city for a moment. While the work of building the Panama Canal has been heralded from one end of the earth to the other as a world accomplishment, the citizens of San Francisco have individually and collectively achieved a like result without any particularly great strain.

Here are the figures for the months of June, as a fair basis of comparison the past ten years showing what has been expended both before and after the fire:

June, 1904	$1,516,533
June, 1905	2,376,928
June, 1906	687,391
June, 1907	3,937,598
June, 1908	3,475,506
June, 1909	1,398,446
June, 1910	1,458,464
June, 1911	2,625,740
June, 1912	2,058,224
June, 1913	2,494,673

Nor are the June figures the result of any fluke. The same results are obtained if a comparison is made of any of the months since the first of January. Taken by months the totals are as follows:

1913.	Contracts.
January	$2,678,990
February	2,559,364
March	3,571,045
April	2,710,520
May	2,206,409
June	2,494,673
Total	$16,221,001

This amount was also an increase of $3,497,890 over the building operations of the first half of the year 1911, when the figures were $12,723,111. If the present rate is kept up throughout the year as has been shown by the first six months, the cost of new structures will exceed those of 1912 by $7,000,000. And that this is very apt to happen is presaged by the fact that downtown structures that are now being planned total a sum over $5,000,000.

Trade Magazines and Their Subscribers

Subscribers to trade journals, many of them, do not realize how very welcome any comment they make is to the editors of the journals to which they subscribe. If they did, they perhaps would be willing to do more suggesting. There may be a few who are of the belief that it is not necessary, and that it should not be necessary, for them to do anything other than subscribe for the paper. This is a very mercenary viewpoint, but, withal, a very natural one. They think, most logically, that so long as there are editors on the job these editors should earn their own salary. But subscribers, in thinking this, fail to realize that the trade journal is different from the other papers which they are in the habit of receiving. They fail to realize, or perhaps they refuse to realize, that the trade paper is a part of their own business establishment and should receive a personal interest similar to that which they put into their own personal business transactions.

It must always be remembered that the value of the trade magazine lies in the observations it gives forth of the business with which it has to do, and that the broader the field from which these observations are drawn, the greater the value of the magazine to its subscribers. It is natural to suppose that incidents arise in the day-to-day running of a business that would be food for good stories, could a writer be on the job to take them in when they occur. These incidents, if they be in the nature of difficulties, and in the manner in which they are met by the subscriber, would be interesting reading, if not educative and suggestive as to the methods of solving business troubles. It is certain that, no matter what they might be about, they would be immensely relished by other brothers in the trade.

Assist, then, in making the trade paper an advertiser of the cures for your troubles. If you have not thought of a panacea applicable to your case, it is always possible to find an editor who has thought of one. Editors are self-appointed doctors of trades. Some are quacks; but there are a few who are really conscientious, and who appreciate the fact that they are not infallible. This kind of editor is always willing to receive criticisms and suggestions from anyone in the trade, and, in fact, is more than glad to have censure or praise from those who can read and appreciate, for better or worse, the matter appearing within the columns of his paper. Get busy, then, and help in making your trade journal a medium that will uplift and assist in the progression of the business that you are in. Remember that in helping the trade as a whole you help yourself. You can not go much faster than the people about you go. And remember this: The trade paper is the best instrument there is to get everybody started. It creates a oneness, a cohesiveness of those within the trade. But in making it a personification of you, your ambitions, your ideals, you must speak through its columns.—Cement World.

High Cost of Brick Houses

A writer in a publication devoted to the manufacture of clay products makes the claim that the high cost for constructing brick buildings is due mainly to the brick layer. He states that brick, while comparing favorably as to cost of material laid down on the ground, with that of any other material, costs more in the building. In other words, it is not the material that makes brick houses cost more, but the labor that places this material in the building.

Further investigation showed these facts: That bricklayers receive $6 a day of eight hours, with a helper to each bricklayer who receives $4 a day, and with a limit of 1,000 brick per day's work.

"It is the bricklaying that is at the bottom of the entire problem," said one dealer when approached to offer some solution. "The manufacturer has minimized the cost of making his product by the installation of modern methods and machinery, but has overlooked the fellow that puts his product into the walls.

"There is a scarcity of bricklayers now, but if we could turn them out like trade schools turn out printers, carpenters and others, there would be a different story. Look at the electricians! Why, a few years ago it was almost impossible to get a competent electrician at a reasonable price. Today, however, it is different. They are still getting good wages, but they are doing more work and better work."

It was suggested that the union bricklayer argued he was not getting more than a living wage today.

"Let him have his $6 a day," replied the manufacturer. "I don't begrudge him his wages. What I do kick about is the output. He limits himself to 1,000 bricks a day, and yet it is a poor bricklayer who can not put 3,000 brick in a wall every day in the week. That makes quite a difference, doesn't it, when you begin to figure construction cost? Take, for instance, common brick here in Chicago. You can get them laid down on the job for $6 per 1,000. Yet you've got to pay $10 to have them laid in the wall—or $4 per 1,000 more than they cost to manufacture.

"What we want is to have the restrictions taken off the amount of labor a man can do in a day. If he can lay 2,000 brick or more, let him do it. Then, too, there is the question of helper. By the rules of the union every bricklayer must have a hod carrier, who must be paid $4 a day, yet where there are a dozen bricklayers on the job one or two would be sufficient.

"As it is today, with ten men on the job, the hod carriers are so numerous they get in each other's way, and there is so little for them to do they have a hard time to find an excuse to keep moving."

Our friend struck a keynote when he said the solution was in the trade school that "could turn out bricklayers like the printing schools and other trade schools do."

Investigation, however, shows that there are few trade schools in the country offering a special course to the bricklayer. If every brick manufacturer in the country could be enthused to the pitch of doing a little local missionary work by encouraging young men of their community to get in touch with schools of like nature, it wouldn't be long before the bricklayers' union would be forced to change some of its restrictions. The law of supply and demand applies to trade and labor just as it does to industries and capital. Scarcity of labor makes labor arrogant and tends to create a monopoly in an industry. With the bricklayers' monopoly broken and the doors open to young men who care to learn a profitable trade, amicable relations will be possible between the employer and the employee, for bricklayers must continue to carry the burden in low wages.

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The new Chamber of Commerce Building at Cincinnati is the highest inland structure in the United States. From sub-basement to the top of the tower the height is five hundred thirty-five feet, or four hundred ninety-five feet above street level. The tower portion of the building is thirty-four stories above and four stories below street level. The structure contains 2,175,000 cubic feet of space, and cost $2,500,000.

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Architectural Jury Selects Best Schools in California for Publication

The jury of prominent architects appointed by the Honorable Edw. Hyatt, State Superintendent of Schools, to advise him in the selection of the best schools of the State, for publication in a new booklet to be sent out to all school trustees and architects, met June 19 at the San Francisco Architectural Club, and were very enthusiastic over the four hundred or more buildings submitted.

From the photographs and drawings exhibited the following schools were declared by the jury to be the best and will be published by the State.

One Room School Buildings—Visalia, plan by N. Y. Davis; Mill Creek, Mendocino County District School, remodeled; outdoor class room, Pasadena, plan and two photographs by Myron Hunt; two room County School, plans by C. L. Stiles; four room School, plans and two photographs by Theo. C. Kistner; eight room Grammar School, Santa Paula, plan and two elevations; Grammar Schools, Madera, plan and three elevations by Ben McDougall; Artesia, plan and elevations by Withey & Davis; High School, Monrovia, plans and elevation showing out of door auditorium by Allison & Allison; Nordhoff, photographs, Princeton, elevation by Parker & Kenyon; Normal Schools, Los Angeles, plans and perspectives by Allison and Allison, San Jose, plans and two photographs by the State Architect, Santa Barbara, plan by State Architect.

The jury of architects was composed of the following members: Lewis P. Hobart, chairman, Chas. S. Kaston, J. W. Wollett, J. J. Donovan, C. H. Cheney and Robert Farquhar (absent). The judgment was held in conference with the Hon. Edw. Hyatt, who was present.

The school buildings shown are of an extremely high order, particularly the larger schools.

In speaking of recent developments in school building in California, Superintendent Hyatt called attention to the fact that this state has taken very rapid strides in the past five years and that now effective built prior to that time are practically out of date as to convenience and planning.

The purpose of this investigation is to put before the public the best examples erected in the last few years, and to this end a jury of architects of high standing was appointed to pick out such buildings as were artistically good, that they might be held up to the community as an example for future work. Mr. Hyatt feels that much good will come of the investigation, both in educating the public and in raising the standard of school building in this state and in the country at large.

Fireproofing Construction

NATHANIEL ELLERY, C. E.

THIS subject has perhaps been flaunted to the public gaze under false interpretation, and more misunderstood, than any other phase of construction. Strangely, so much has been written and said of it, and yet so few have a clear conception of this most vital and important question in all building work. The annual fire losses in America are so tremendous and appalling that it staggers one to give proper comprehension of why we continue yearly to feed the flames, to the positive economic loss to the country. Municipalities continue to expend vast sums in fire departments and great water systems, solely to meet the fire demands, and at the same time remain unduly lax in their demand of construction of a quality to be a fire preventive. We can not truthfully say our buildings of today are anywhere near a reasonable fireproof standard. Taken as a whole, we are using construction in our fire limits that is nothing better than a good fire breeder, and yet the notion prevails that so long as some materials used in buildings are incombustible, they make them fit as a fire resistant. It is my desire to carefully take up the various matters that enter this line of work, and without technical display, give facts and reasons for the guidance of the builder that many of the minor and sometimes unthought of problems of fireproofing may be squarely met and properly treated.

In the history of building development, humans began to crudely shape original structures of poles, then laminated stone and sun-dried bricks, and then fire-burned bricks. Go back to the ancient ruins and see those materials best preserved, and you find them of burnt clay. And through the ages and today, we find the same burnt clay a material of superiority as a fire retardent and a fire resistant. It has gone through fire in its manufacture and is incapable of again assuming the heat it was once subjected to. Ordinarily we divide the materials of construction into combustible and incombustible classes, and the latter class in turn is divided into damageable and non-damageable in the heats produced by the ordinary fire. With these divisions there is yet a matter so vital to the owner that it must be given a proper consideration, otherwise our stipulation would be totally inadequate to meet a fair presentation of the subject. Reference is made to those materials used which are damaged by ordinary fire and can or can not be replaced at the damaged part or section only. For instance, should you have a building partially destroyed by fire and you desired an adjustment of the insurance, you would require the replacement of the damaged parts equally as good as the original, or as nearly so as practicable. Here, then, if you had walls constructed on the unit basis, that is, materials constituting the walls were of brick or blocks, you may replace the damaged units, while if you had a material as concrete constituting those walls, then to make the job good it would be necessary to tear out the wall to a division line in the work. Later in this article I shall go more deeply into this comparison, that no misunderstanding may result.

Too little attention and study has been given our fire limits, and the certain change at some future date, extending these limits and thus including a vast area of wooden construction, ultimately means expensive fireproofing in this area. Occasionally we note a building here or there erected outside these limits which complies with the laws for building in the restricted district. It shows a highly commendable spirit in the owner, but does he or she realize the positive necessity for an extremely high-class fireproof structure in this instance. The position of the building and its surroundings mark the first step in fireproofing the structure. If we may build in a lot or block, and isolate the structure from other buildings, then may we release our attention to strictly fireproof exterior finish and allow of some latitude in damageable materials, as stone and metal. In a nest of wooden buildings, no chance should be taken, and the best materials and design should enter the work if you hope to be secure against fire. Go into the fire limits of our cities, and where the buildings are closely located, view the lack of fireproofing, and again note the necessity of construction to resist the ravages of conflagration. It is apparent to the casual observer and calls forth criticism of those who study this problem with a view to betterment of conditions. Vast quantities of wood enter the construction of the major portion of the interior of most of our buildings, and for this reason the location of the structures has an intimate bearing on the relative fire resisting qualities. Erect a building in the fire limits closely surrounded with structures whose interior is wood, and you must provide extra good materials to meet the contingency of conflagration. Build on the edge of the fire limits, and again your risk is immeasurably enhanced. So with supposed fireproof construction without those limits. Unquestionably, the class and kind of building must be improved in the above positions if we hope to resist the destruction attending a moderate conflagration. In general, we are not measuring up to a standard good business demands in this matter. From the location, we may pass to the use of the building and its arrangements. These points are supremely vital and lead the way to the use of proper fire-resisting materials, to be incorporated in building work. Regard, for instance, some buildings that come to your attention, and note if the following conditions are fulfilled:

Plan the office structure along the lines of best practice and make the space into units, so that fire from the inside may only damage materials in that unit, and can not spread. Allow no great chimneys or elevator shafts, stairways, ventilators or pipe vents. Control all openings into courts or light wells, so fire can not get in these flues and make a furnace of the building. All elevator shafts should be closed, stairways at the ground floor should lead directly to the exit of the building, and at each floor line fire doors should be established. The use of wood in the interior finish should be minimized and the windows should be of high grade wire glass. Other buildings should receive special treatment as to arrangements. Warehouses of more than one story should have drains or scuppers, that water may be readily drained from any floor without damage to the other floors. Stores should be arranged to preclude interior fire from reaching other stories through rotunda openings or other escape vents leading between floors. In fact, each structure should receive attention in all details as to arrangement to minimize loss by fire, as sometimes the smallest of these may entail heavy loss. Much money may be spent in furnishing supposedly fireproof construction, and a minor item of precaution disregarded, thus risking the expensive work unduly.

We now come to the important item—materials that enter the building work. The frame or structural part constituting the strength of the building must be of fire-resisting quality, or else the value of the whole construction is subjected to failure by fire. Steel, the highest

grade of framing material, has but little resistance to heat and must be protected in order to meet its best service. Encase the steel in a good fireproof material and the acme of structural work is reached. Leave it to the ravages of heat and it fails utterly.

Many reinforced concrete frames are now being used and they are termed fireproof. Let us here diagnose this practically new chemical material and ascertain its fire-resistant value. Go to a reinforced concrete building while the forms are being stripped, and see the inequality of the deposited material—solid concrete rich in cement, weak concrete, lean of cement, and then rock pockets of little strength value. Is this fire-resisting? Yes, but in the order of the content of cement. The rock pocket is valueless, the lean material has some ability to resist heat, and the good material resists from 500 to 1000 degrees of heat Fahrenheit. To be sure, the depth of affection of the good concrete is limited to a depth of about one inch in the ordinary fire, while the smeared-over rock pocket of concrete is worthless. It is now regarded in good practice that the material outside of a column or beam is simply fireproofing, and is not calculated to take any part of the stress of the member. Again, all corners should be rounded, as fire spalls the sharp angles and will expose the metal of reinforcement to destruction by heat. It is remarkable how rapidly and easily we assign merit to a material without full demonstration of such. Let us take a fire of 1500 degrees Fahrenheit heat, and subject a concrete structure to it, and as the material dehydrates, or the water of crystalization is forced out, we apply the stream from a hose, the pressure of which immediately casts off the inert material, so that if the concrete surface is again exposed to heat, the same action goes on, destroying the material to an irreparable point. This is a most likely situation and may occur at any fire in a concrete building. Did you ever stop to think that the heavy structural timbers in a mill, or slow burning mill constructed building after fire chars the outside, burn but slowly, and if you remove the char the burning is augmented? Here is a point in common, that concrete is incombustible and wood is combustible; but the materials are destroyed by the same agent. The old-time brick walls used structurally have the highest fire resistance of any of our commercial building materials, and rightfully, for they are made by subjection to a heat of from 2000 to 2800 degrees Fahrenheit. Bricks are made, not destroyed, by heat. How then, as a fire resistant, can we class it with those materials destroyed by ordinary fire heat? You may as well compare the factor of safety of a steel frame to that of reinforced concrete. One technical writer has recently stated that if we applied the same relative factor of safety to reinforced concrete construction as now used in the field, we do to steel construction, the use of concrete would be abolished.

The outer walls of buildings subject to conflagration or external heat should be made of brick, not concrete. Well burned bricks with good mortar withstand the flame. The mortar may give way ¼ of an inch from the surface, but this can be raked out and the joint repointed. A concrete outer wall subjected to the same heat will dehydrate, or break down in its structure, about one inch, which material can never be replaced satisfactorily, as a junction of new and old concrete is always a weakness in building work. If that concrete wall had been plastered, then this outer material would have spalled and popped off. Again we may recite the experience in San Francisco of the water proofing on the side of a concrete building that recently caught fire and made a splendid blaze on the side of the wall and destroyed a material used to protect from dampness, not fire. To be sure, one may say the same material used on a brick wall would act similarly; yes, but the wall of brick is not so porous as the concrete, and therefore needs not the heavy water-proofing used to protect the concrete wall. The relative porosity is not readily determinable, but do you find the rock pockets, cracks of shrinkage and joint cracks of the concrete, all of which are points of leak in the wall of brick? While on the subject of outer walls I can not refrain from calling attention to the superiority of brick and terra cotta for front walls, instead of reinforced concrete or stone, from a purely fire damage point of view. In the great fire of San Francisco, terra cotta and brick front walls stood the test wonderfully well, while stone spalled and chipped until it was entirely unserviceable. To properly decorate the front of a concrete building, it usually requires cement plaster and much cast concrete work. In a fire, can you not see all this finish work destroyed by a heat that would not even mar brick or terra cotta? Let us now regard the interior of the buildings.

The partition walls, fireproofing around columns and beams, the inside trim and other items used internally. For steel structural members we should by all means fireproof with the best resistant materials. Plaster on metal lath, hollow tile and concrete on mesh are used. As we all know, lime in plaster fails in just ordinary heat, so that this is simply a retardent. Hollow tile laid up in good mortar and given space to expand makes excellent fireproofing, while concrete, on account of its inequality of density, is very uncertain in its fire protection. Hollow tile may cast off its facing, but being in units is easily repaired. It should, however, be tied to the column or beam so that it will not be stripped from the structural member. Concrete, on the other hand, will certainly dehydrate, and its proper repair means a complete new encasing of the member. It is difficult to clearly ascertain on the work the line of demarcation of the damaged and undamaged concrete, and therefore another uncertainty arises.

For interior partitions we are well acquainted with the old solid brick wall, which was surely substantial and fireproof, but its weight has now precluded its use in this position. In its stead we employ the solid plaster partition, metal lath and plaster, hollow tile, and reinforced concrete. However, the latter is usually too heavy for modern designing. Thus the hollow tile partition with inserted wire mesh between horizontal layers gives rigidity and best stands the heat. Plaster in its various forms is certainly a retardent, but it is not very effective, and especially against a moderate fire.

In the better class of buildings now being erected wood is practically relegated to the past. Metal trim, finish and furniture have now become a part of the modern fireproofing scheme. Wood, if used at all, should be placed with caution. View some of our class "C" buildings and note the mass of wood for construction included within the outer walls. In these a room for fire will undoubtedly destroy all materials except those of the highest resistance, as brick. Again we see warehouses and stores to house many combustible material built of reinforced concrete with the certain knowledge that vast destruction will occur should an internal fire get well under way. Many fine fighting theories have been erected to minimize the chances to which our structures are subject, but these at times fail to work as the opportune time. The feature of sprinkler systems, first resting on a concrete ball structure was so designed as an earthquake object with [illegible] as to make it safe

for use until a whole new structure of steel had supplanted the shattered concrete. Had a fire occurred during this period of change for about two months, it would have been unhampered by any sprinkler system. Luckily, this tank was not precipitated through the roof and floors of the building it served. Many advocates of various materials for the different parts of a structure have given profound thought to their proper use, and again, much commercialism is involved in forcing a material into a use it is not fitted for. I can not resist to quote from one of the recent books on reinforced concrete and note a leading discrepancy. "As concrete in its manufacture has passed through a period of intense heat, it suffers but little from the further application of high temperatures." No one ever heard of concrete passing through great heat in its manufacture. Cement did, but when put with water it undergoes a chemical change to make the sand and rock ingredients of the concrete stick together, and when we have the artificial stone-concrete it is made by adding water, not fire.

The old reliable brick wall for fire resistance can not be beaten. The great designers and constructors know its value and use it in modern construction in places where best adapted. We have all heard of the great Woolworth building in New York City. In its walls 17,000,000 bricks were used and nearly 60,000 tons of terra cotta and hollow tile. This building is termed absolutely fireproof and is the acme of such construction to date. The subject presented is so vast in scope one can not treat it fully in so short a space, but to give the general characteristics and some guiding details. It is well, however, to keep the matter before the builders and owner's vision, that he may profit by the application of sound fireproofing for construction.

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Care of Oak Floors

If one only knows how, nothing is easier than the care of a well-finished oak floor. Water should never be used on a waxed or varnished floor. The surface may safely be wiped with a cloth dampened in tepid water to remove dirt and dust, but the dampness should be immediately taken up with a dry cloth.

One of the best mixtures for keeping a floor in good condition is the use of equal parts of sweet oil, turpentine and vinegar, well mixed and rubbed on the floor with waste or cotton or woolen or rags. The vinegar will cut the dirt or grime worked into the finish from shoes; the sweet oil produces a luster, and the turpentine promptly dries the moisture.

The above mixture need not be applied oftener than once a month to insure a floor finish that will resemble the sheen of a piano.

Should wax finish become worn in spots from hard usage, a little of this mixture, thoroughly rubbed, will renew the finish quickly.

The occasional use of a weighted floor brush alone or with a piece of Brussels carpet placed beneath it, will assist in keeping the finish of an oak floor in good condition.

Once a year it is well to use a good floor wax and rub into the floor with the aid of a brush, with or without a piece of carpet attached. Before the finish is worn down to the wood, an additional coat of wax should be applied and thoroughly rubbed.

For School House Construction

The Bureau of Education, Washington, D. C., is sending requests to prominent architects throughout the country for data to be used in a bulletin on school house construction.

The information desired consists of the following:

1. Photographs: (a) exterior; (b) special features of interior construction and arrangement; (c) special rooms as assembly room, gymnasium, manual training, domestic science, laboratories, toilets, baths, etc. 2. Drawings in black and white of floor plans. 3. Descriptions of special features. 4. Statement of actual cost per cubic feet.

These bulletins will be distributed to school men and school architects all over the United States.

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San Francisco Architectural Club, 126 Post Street

To the Officers and Members of the Architectural Clubs of America:

Gentlemen: At the last regular meeting of our Club, a committee was appointed to investigate the feasibility of instituting a system of membership transfers between the various Architectural Clubs of America. And it is with this view that we propose the following:

At the present time the Clubs of the Pacific Coast transfer members in good standing. Any member going from one city which has an Architectural Club, to another, may become a member of the Club in the latter city without the payment of an initiation fee, upon presentation of a clearance card from the Secretary of his former Club.

At this time draughtsmen are continually leaving one Club to study at the great universities and to work in the various offices throughout the country. And there are a great many draughtsmen now in cities on the Pacific Coast who, if given a chance to transfer, would in all probability take up their memberships in Clubs of these cities.

The benefits to be derived from such a system of membership transfers would be:

(1) A decrease in the resignations of members who are traveling.

(2) An incentive for members on leave of absence from their own Clubs to join the Club in whatever city they may be working.

(3) Assistance to draftsmen in securing employment in a strange city.

(4) Membership in Architectural Clubs would become more valuable by reason of this system.

(5) The various Architectural Clubs would be brought into closer relationship and this might eventually result in permanent organization of Architectural Clubs.

We would ask that you give this important matter your consideration at the earliest possible moment. Upon your approval of same we will submit our plan for your criticism. Any suggestions you might offer would be greatly appreciated by,

Yours very truly,

S. F. ARCHITECTURAL CLUB,

Address: W. T. GARREN, Transfer Committee.
Transfer Committee

We will be pleased to hear from any club which has not received this letter by reason of our not knowing their address.

Fees of the Architect

In view of the many published statements about the large fee to be received by Guy Lowell, the architect of the new court house for New York, it is interesting to observe the element of uncertainty which attaches to the profit to be derived from an undertaking of this magnitude, says the Philadelphia "Public Ledger."

The cost to an architect of preparing his drawings and specifications and seeing that they are properly carried out, in offices run on the best business basis, is at least one-half of his commission. This, however, applies only to the general class of buildings and not to residential or public and monumental work. The cost is then as high as seventy-five per cent of the architect's commission.

The United States Government prepared a statement which was submitted to Congress (Senate Document No. 916, 62d Congress, second session) which gave the average cost of preparing drawings and specifications alone, exclusive of superintendence or any other field expenses, for the years 1905 to 1911, inclusive, to be 6.2 per cent. This was for preparing the drawings for the buildings erected by the United States Government and done by the supervising architect of the Treasury, a man known for his great executive ability, and, therefore, done with the greatest economy possible.

Reports have been submitted by the State Architect of New York showing that the cost to the Sate for preparing the plans and specifications made in the State Architect's office exceeds 6 per cent. The cost to the New York Central Railroad for preparing the plans for their new station has exceeded 6 per cent. Therefore, an architect who is able to prepare the plans for a $10,000,000 building at a cost to him of less than 6 per cent of the total cost of the building, must run his office in the most economic manner possible and take his chance that the work may cost him more than his entire fee.

It seems to be the general impression in many uninformed places that an architect makes a few sketches taking a few days of his time and for this work receives an enormous fee. The fact of the matter is that to prepare the plans and carry out the work of a $10,000,000 court house, will require the services of from twenty to thirty high-priced draughtsmen, as well as a number of engineers and specialists on structural work, heating and ventilation, sanitation, mechanical equipment, etc., working for a period of at least five years; will require a large office at a high rental, and with the most economic administration, his work will cost about $450,000. This will leave him about $150,000 profit, or about $30,000 a year.

What business man is there who is willing to head a $10,000,000 corporation with a salary of $30,000 a year? What corporation is there of this size that pays its counsel less than this amount? Such men, however, receive these salaries without investing any of their own money to obtain it. The architect must invest about $450,000 in actual cash paid out to receive his profit of $150,000.

All of the above has nothing to do with the professional training and skill of the architect and for which he receives his compensation. He must, therefore, not only invest his own money and run a large business office with a chance of running it at a loss, but he must give his skill in designing, his knowledge of engineering and construction, and his training in sculpture and mural decoration in order that he may obtain all his

Of course, it would be possible for an architect to have his work cost him less than one-half of his commission, and the result would be poorly prepared plans and specifications and inadequate superintendence of the erection of the building, which would result in a greater cost of the building, a far greater cost than any saving in the commission paid to the architect. In carrying out the work of the new court house the architect will have to give almost his entire time and attention to this one piece of work and in comparison to the fees or salaries paid to the best men in other professions his compensation will be very small.

Architect Hogue on Terra Cotta

Architect C. J. Hogue, of Portland, who is associated with E. T. Foulkes, strongly favors terra cotta in building construction. In a recent interview Mr. Hogue said:

"In going about Portland since my return I have been surprised at the large number of wood-framed residences with exterior finish of cement mortar on wood or metal lath, and have wondered why terra cotta blocks have not come into more general use for wall construction here as they have in the East.

"It seems to me that in America we have tried to adopt various methods of building from Europe without going far enough into the reasons for them, and that one of these is cement finished exteriors. In England and on the Continent a great many, probably the majority of buildings are finished in cement, and whitened, but the reason is that the bricks are soft in quality and not pleasing in color and they are covered to protect them from the weather and to obtain clean and attractive exteriors. We liked the result and adopted the material and applied it to our wood-framed house without much thought of the future. An inelastic material like cement, concrete, brick or stone is bound to shrink, expand and contract with changes of temperature. In large masses of stone or brick the unit of construction is so small that the cracks are distributed so that they are not noticeable, while in concrete construction large cracks will occur in a few places, unless the concrete is so reinforced as to distribute the cracks fairly uniformly over the mass. Cement mortar on wood framing is not sufficiently reinforced to withstand the expansion and contraction, warping and twisting of the frame in the wide range of temperature and alternate wetting and drying in our northern states.

"Terra cotta lumber as now used for walls, however, offers a material strong enough to carry the floor construction whether of wood or concrete, one which gives a good clinch for the exterior mortar and the interior plaster and which has contraction joints at sufficiently close intervals to localize shrinkage cracks. Lintels over windows and piers under concentrated loads can be reinforced with steel and grouted with cement mortar or concrete to give almost any necessary strength. Houses so constructed are not much more expensive than if framed of wood, cheaper than if built of brick, warm in winter and cool in summer on account of the insulation of the air cells in the blocks, and, especially if the roofs are covered with slate or tile, are practically fireproof against exterior exposure.

"It seems to me to be a material well adapted to our climatic conditions where a fireproof finished exterior is desired."

Dropping Concrete One Thousand Feet

In providing a concrete lining for the double shaft of the Kingdom mine at Globe, Arizona, concrete was successfully dropped into forms one thousand feet below the mixer, reports Popular Mechanics. The lining was applied in successive rings of from 150 to 220 feet in height, beginning at the top. The forms, in 12-inch sections, were placed along the sides, ends, and across the center of the shaft. The concrete was chuted through a four-inch pipe discharging into an ordinary steel bucket suspended from the finished portion of the lining above. A short steel chute, extending from the side of the bucket, delivered the concrete directly into the forms.

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Inspection of Old Buildings

The Los Angeles Board of Public Works has endorsed the project of Chief Inspector of Buildings J. J. Backus, providing for the inspection of buildings which have been long in use and have not kept pace with the existing building ordinance as regards proper equipment and safety precaution. The report of Inspector Backus has been referred to the city council with the recommendation that positions of inspector be created for this purpose. Many old-time structures which have become dangerous through lack of repair must be remodeled to conform to the present building law, and others which are beyond repair will be condemned. An amendment is also proposed to the building ordinance making it unlawful to overload floors, with special reference to buildings used for public or semi-public purposes. Three inspectors are to be added to the building department to look after the proposed work.

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Individual Service

A leading Chicago architect some time ago suggested to the members of the profession that they should be so well acquainted with the work of especially skilled workmen on buildings, such as stone cutters, wood finishers and bricklayers, that they could suggest or insist a particular piece of work be carried out by a certain man or these particular men because the architect was familiar with the man and his work and he knew just what the work would be when it was finished. This is a good idea. It is an old idea grown into disuse in the rush of the past few years, but it seems that the men who are most successful are coming back to it. There is nothing like individual service. A Brooklyn architect also makes a good suggestion which, if followed out, will pay many times over the watchfulness it may require at first upon the part of men who have grown away from the good manners of youth. In an address just given by Dudley McGrath, a well-known architect of Brooklyn, before the Architectural Department of Pratt Institute, being one of a series of lectures arranged by the Brooklyn Chapter, A. I. A., on subjects pertinent to architecture and buildings, he added this to his practical remarks concerning superintendence: "In performing your work, whenever it is possible to do so, compliment the workman or contractor upon the work being done. We all like to hear nice things said about ourselves and one who only finds fault and never anything to commend is much disliked. You will find that by kind words, when it is possible to give them, you will, in the long run, obtain much the better results."

Local Stone for Postoffice Building

Through the efforts of Congressman A. W. Lafferty, Northwestern quarrymen and stone men have an opportunity afforded them of supplying stone for Portland's new postoffice building. The Portland Chamber of Commerce has been notified by the Secretary of the Treasury that this is the case. Those interested are securing data from the Secretary of the Treasury and the Supervising Architect in the matter. Inasmuch as $1,000,000 is to be expended on the structure and it is to be a public building, the stone interests of the Northwest, and of Oregon in particular, are interested that local stone should be used, if possible. This will be a crucial test of the qualities of local stone, and may have a great effect on the development of the industry. The Chamber of Commerce, Manufacturers' Association and Stonecutters' Union, represented by L. J. Birion, are co-operating in the movement. A survey of the Northwestern stone industry is in progress, which will result in a report as to possible output and other data. Samples of the various quarry products are to be forwarded to the Assistant Secretary of the Treasury Allen, through Congressman Lafferty, as well as names of quarry owners.

Local architects incline to the belief that a local stone entirely satisfactory can be found. Price and quality are two important considerations.

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Architects Aid for Rose Festival

At a recent meeting of the interests active in the reorganization and perpetuation of Portland's Annual Rose Festival upon broader lines and wider scope, an unusual feature was presented. President Edgar M. Lazarus, of the Oregon Chapter of the American Institute of Architects, proffered the advisory services, free, of a commission of five architects in the architectural and artistic features of the festival. A local newspaper opines that this "was indicative of the new policy of the professions in Portland to be definitely helpful in public matters."

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Evolving a New School of Architecture

The "Pacific Coast Architect" is in receipt of the Catalogue of the Fifth Exhibition of the Portland Architectural Club, held in this city, last month. The catalogue, like the event it represents, is especially artistic. It will ever serve as a perpetual reminder of that splendid exhibition. The world in general and the Pacific Coast in particular, should welcome, sustain and encourage these annual events. They make for the uplift of humanity and furnish high ideals in art and esthetics. It may not be too broad a prediction to make that the various architectural clubs of American coast and British Columbian cities, through these exhibits, at regular intervals, will gradually develop a school of architecture peculiar to the Great West itself. There are conditions and environments in the West distinct from those in the East, and it is probable that their influence will, by degrees, leave their indelible impression. The evolution of a distinctive school—one sui generis—is but a logical conclusion.

Too much praise can not be given the officers, members and exhibitors at the recent exhibition, for they have labored in a good cause, and the excellent fruit of their endeavors is in evidence.

Residence W. T. Sesnon,
Soquel, Cal
Ward & Blohme, Architects
San Francisco, Calif.

Photo by Gabriel Moulin

Photo by Gabriel Moulin

Living Room Inglenook, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Living Room, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Dining Room, Residence W. T. Sesnon,
Santa Cruz, Cal.
Ward & Blohme, Architects,
San Francisco, Cal.

Photo by Gabriel Moulin

The Hall, Residence W. T. Sesnon,
Santa Cruz, Cal.
Ward & Blohme, Architects,
San Francisco, Cal.

Photo by Gabriel Moulin

Front Entrance (North), Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Entrance Porch, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Lanai, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

West Porch, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Conservatory and Breakfast Room, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

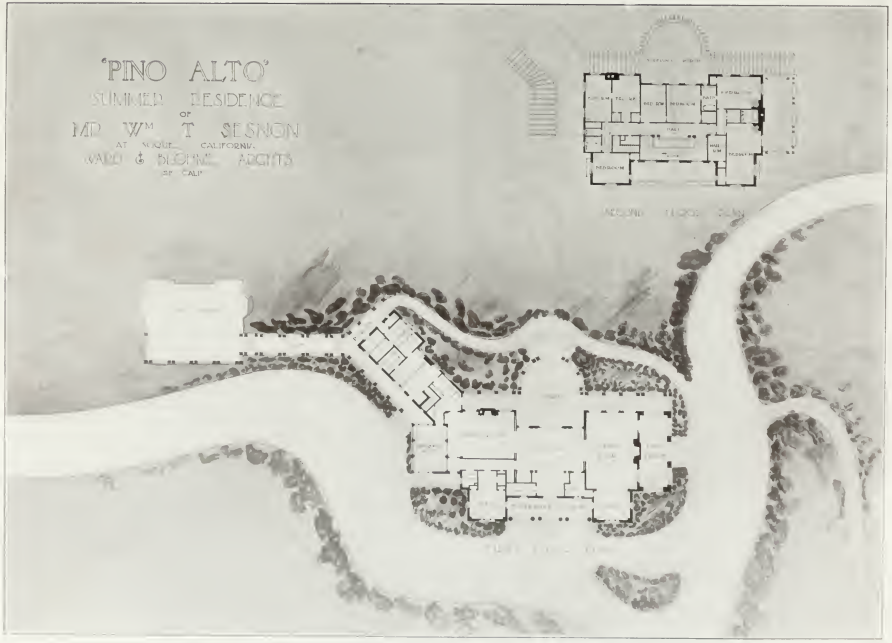
Entrance Gate, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

Garage and Stables, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.

Photo by Gabriel Moulin

The Lily Ponds, Residence W. T. Sesnon,
Soquel, Cal.
Ward & Blohme, Architects,
San Francisco, Calif.


'PINO ALTO'
SUMMER RESIDENCE
OF
MR Wm T SESNON
AT NAPA CALIFORNIA
WARD & BLOHME ARCHTS
SF CAL

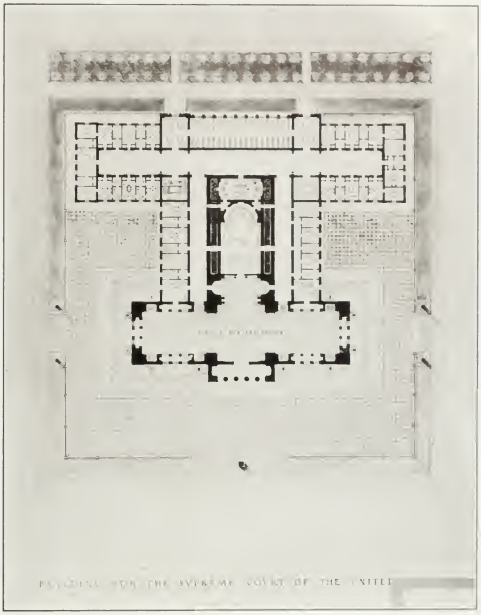


Photo by Gabriel Moulin

Building for the Supreme Court of the United States
Stylford L. Joyce, Phoenix School, Sandstone Competition
First Medal, S. B. A. A.
Atelier University of California

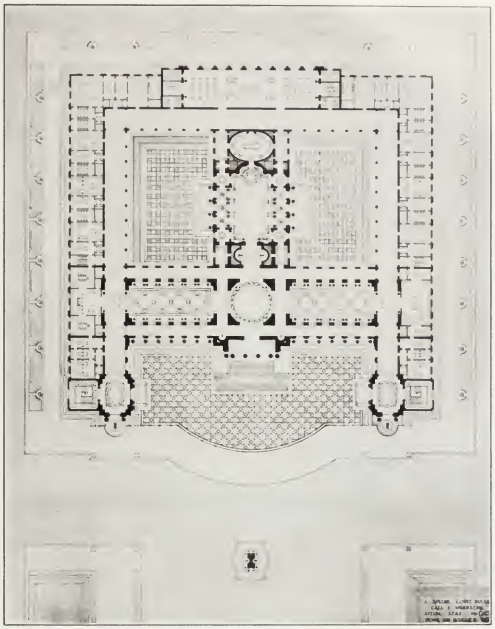


Photo by [illegible]

Building for the Supreme Court of the United States
Carl F. Warnecke, Placed Third, Sharing Top Competition
First Medal, S. B. A. A.
Atelier Brown Bourgeois

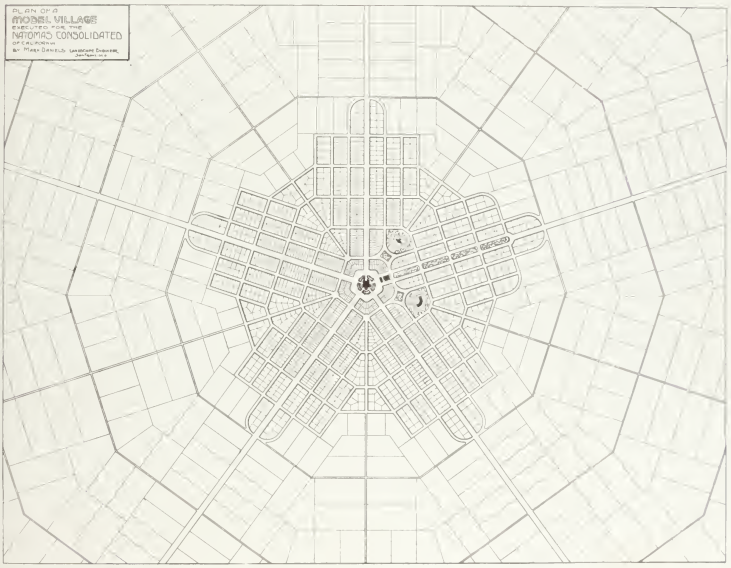
Town Planning

By MARK R. DANIELS

THE SCIENCE of town planning has developed as a product of the need of better conditions commercially and esthetically in our rapidly growing communities. It is not, as has been thought by many, a subject taken up only from the standpoint of beautification and adornment, but one that is now being considered from the angles of commercial efficiency, increased and simplified inter communication, and the enhancement of property values and city income.

It has been established beyond doubt that the tendency of modern civilization is at present at least toward a concentration of population in the cities, and with this tendency have come traffic problems, transportation problems, questions of public health, and many serious menaces to the happy existence of the people. For this reason it has bee me essential that conditions governing the growth of cities be investigated and studied to the end that higher efficiency shall be attained in all phases and walks of life.

It is quite evident that in order to plan wisely understand and appreciate the needs of any community, a general knowledge of the forces controlling the development and growth of communities in general is necessary. Problems such as the theoretically correct relative positions of wholesale districts, retail districts, warehouse districts, executive centers, commercial centers and residential centers, are constantly confronting us in the layout of new towns and in the study of means for improving towns and cities already extant, and the



and other problems are simplified to a degree by a knowledge of the forces creating cities.

The four forces now active in the creation of towns and cities are commerce, politics, manufacturing and social forces. Any one of these or a combination of any two or more may suffice as justification. Small cities a town may spring up. In towns and large cities all of these forces are present and active, each one developing about some center and growth of population. A town may spring up about a manufacturing industry. In time a residential section will be built, a business and wholesale district may develop followed by the greater

establishment of the financial and executive centers. Viewed in a certain light it may be seen, then, that every large city may be divided into its various departments, with centers of activity in each well established. The principal problem of town planning is the facilitating of intercommunication between these various centers in such a manner as to give a minimum amount of travel necessary, while preserving and developing as much as possible the esthetic and beautiful side of city life.

Many methods of planning arteries and streets for a town have been developed, all figured to accomplish these results in a manner as nearly theoretically perfect as possible. The three most generally known systems are the radiating system, the checkerboard system and the checkerboard system with superimposed diagonal arteries, which latter combines the merits of the checkerboard system and the radiating system. It has been the general consensus of opinion that the latter is the most efficient as regard intercommunication, but is more extravagant of land and more costly of operation and maintenance. The tendency of the radiating system such as Paris and Karlsrhue is to develop a strongly centralized area of activity and property values which often results in serious concentration of traffic and does not solve the problem of different centers. The effect of the checkerboard or gridiron system is to develop axial growth, which results in a slightly better distribution of property values and traffic, but results in a great waste of time and energy in intercommunication between centers. Cities such as New York, Philadelphia and Chicago fall in this category. The gridiron system or checkerboard system, with the superimposed diagonals, seems to solve the problem by allowing of direct intercommunication along the diagonals between centers, and at the same time leaving the property enclosed with these diagonals cut in a very regular shape. Washington, D. C., is the most perfect example of such planning and has been maintained by many as the most perfect arrangement for city growth. However, none of these systems has as yet been proven to be the perfect plan.

A plan recently developed by Mr. Griffin, a young Australian architect, for the capital of Australia, seems to be one of the closest approximations to an efficient street system yet devised. In this plan each center has been located with regard to the topographical conditions considered in the light of the purposes to which they were to be put, and direct arteries planned between these centers. About each center was then planned an individual system of streets in just such a manner as they would have been planned had each of these centers in itself been the nucleus for a town of that particular character. For example, the manufacturing center was chosen where the topographical and climatic conditions seemed most advantageous, and about this manufacturing center was planned, in either hexagonal or octagonal shape, a system of streets covering sufficient area to conduct a small population. Similarly, the executive, civic, retail and residential districts were chosen, and about each center was developed a system of streets either on the octagonal or hexagonal layout. As the street system about each center developed and expanded, it merged eventually into the street systems about the other centers. The result was direct intercommunication between centers by the way of main boulevards, with a more or less gyratory or a circular system of street about each center.

The plan accompanying this article is one of a village designed by the author, which might be considered as a single unit in the plan of a large city. This plan was executed for a small town in which it was considered advisable to concentrate the business and executive center in one small area, about which the town should grow. It might, however, be taken as the plan of a strictly residential section in a large city, in which case the central point could be well adapted to some form of adornment consistent with the district.

The plan here shown is what the author terms a "five-point plan," in other words, a plan based upon the intersection of five radiating main arteries. The advantages of such a system are, first, the terminating of each artery by a structure; second, no arteries passing through the center on a straight line, obviating the necessity of going around a central point to continue in one direction; third, the obtuse angles at which streets intersect. Had this plan been executed with six or eight radiating arteries, the angles between these main arteries would be acute, and would also necessitate passing around and about the structure in the center, which, in this instance, is preserved for the courthouse. The esthetic value of such a plan is perhaps the most attractive, for, as may be seen, it is possible to terminate the vista of each and every street with some object such as fountains, parks or public buildings without materially interfering with the flow of traffic, and at the same time obviating the necessity for traffic to turn any acute angles or few angles which are as small as ninety degrees. Upon analysis it will be found that in such a plan seventy-five per cent of the traffic between any points or districts will be accomplished in a distance which is not over fifteen per cent greater than a straight line between these points. In order to accomplish this result in the checkerboard system with the superimposed diagonals, it would be necessary to plan so many diagonals that the area consumed thereby would seem to be almost prohibitive. The objection to such a plan as the one here shown is the concentration of traffic and property values in a very small area. It is the belief of the author that the closest approximation to a perfect city will be the development of a plan based upon the radiating system into the five point intersection and connecting centers by means of these main arteries, and developing the arteries about the centers with a gyratory street system. Such a system permits of the minimum amount of traveling and intercommunication and offers a maximum number of focal points and termini for vistas.

Perhaps there is nothing so uninteresting as an endless street along which are built monotonous rows of buildings. If it is possible to plan a system of streets such that a minimum number of structures may serve to terminate a large number of street shedding their charm along many vistas, no effort should be spared to accomplish such results.

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To Protect Records

In order to protect the valuable records of the government from danger by fire Congress has made an appropriation for the installation of a modern system of auxiliary fire protection for three of the largest buildings occupied by the Department of the Interior in the city of Washington. A committee has been appointed to investigate the relative merits of systems adaptable to the buildings of the Department and to prepare plans and specifications. All communications regarding the subject should be addressed to the Chief Clerk of the Interior Department, Washington, D. C.

The Architect and His Work

Work is but the visible expression of the inner feelings of the workman, says "Building Progress." Nature has so endowed us that we work out in permanent form some of the finer feelings of our being. Naturally, we have different modes for expressing our thoughts. The sculptor models his in clay or carves them from stone; the musician expresses his feeling in a flood of melody; the writer puts forth his best efforts in the authorship of books; illustrators and artists draw or paint their fancies, and architects give vent to their feelings, not in the design of buildings, but in creating them out of the rough materials at their command.

An artist draws a pretty picture and his work ends there. His work is judged by the impression that picture makes on those competent to judge art and its works. The architect puts his ideals on paper, and his work is then but commenced. He is judged, not by the layout of the plans, the design of the mechanical installation, or the beauty of the elevations, but on the building itself when it is completed. Very few people see the plans and must of necessity judge the architect by the building he has erected; besides, the owner did not engage him to draw a set of plans. Those are but incidental to the real work, and to guide the workmen. The architect is commissioned first and foremost to erect a building of some kind.

The architect who does not feel for his work and long to give expression to his ideas in enduring form can no more be successful than the musician who plays by rule or note. He might be an architect by profession, but he is not an artist in building, and will rightly take his place among the artisans of his calling.

The artist succeeds because he has no one working with him to help or mar his efforts. The architect, on the other hand, is dependent on others to carry out his ideas, and his success in picking the right men determines the success or failure of an operation. Among the contractors in every line there are artists and artisans, just as there are in the architectural profession. The artists feel for their work, take pride in what they do, and are satisfied only with perfection. Such men are like chords in a harp, which vibrate in sympathy when other chords pitched to the same key are struck; and for the successfull construction of a building, for the proper working out of the ideas of the artist-architect, the contractor must be in harmony with him, in feelings, in pride and in ambition. In turn, artist-contractors generally have working for them artist-workmen, and so the chain of sympathy and harmony is complete, from artist to laborer.

The part played by contractors in the erection of a building can not be over-estimated by the architect. They are the tools by means of which he executes his dreams and carves out his future. Indifferent contractors or workmen can destroy the beauty of the best building ever planned, and the architect will be judged by the work as they leave it, not by the artist's dream he started out to transmute to brick and stone.

It is service, then, more than work or price, that an architect must look for from a contractor. A contractor might be honest and reliable, but wholly lacking in artistic taste or sympathy, so that, though willing to do so, he is incapable of carrying out the wishes of the architect. Many an architect has had trouble with just such men, and the result has always been a compromise. And compromises are never satisfactory to any one. Just pick out a superior bit of architecture somewhere in which every minute detail shows the fine Italian hand of an artist, and fancy what a horrible result both the same building would have been, wrought from the same design, but by inferior workmen. The difference would measure the one short step from the sublime to the ridiculous, for plain ordinary buildings can stand the tool-marks of the botch without jarring on the sensibilities much better than can a building of architectural pretension. It is the contractors that work for an architect who determine his failure or success in the calling and give him his standing in the community. An architect must be a dual personage: an artist by instinct and a builder by training. If he fails in the second capacity, he is as much a failure as though he were no artist, but lack of ability in that line can be, and is, remedied by surrounding himself with builders only who are in harmony and sympathy with his efforts, and can supply the qualities he lacks.

As the architect receives the credit for all good and artistic buildings he erects, conversely he receives the blame for and suffers from the failures on his operations. One architect the writer knows of, in an evil moment, let a contract to an unknown and untried bidder. The building fell down before it was completed, killing many and injuring more. Now, the design of that building was all right, and the failure was due entirely to faulty construction; yet it was the architect, and the architect only, who suffered by the failure. As the one in supreme charge, perhaps, that was right, for he should have selected his contractors with greater caution. Nevertheless, it was rough on the architect to be pilloried in all the papers as incompetent and have his business, the effort of a lifetime, ruined by a contractor who escaped without penalty.

Sometimes the architect is swayed by the owner on account of cost, the natural desires of owners being to keep down the cost, and often placing price ahead of service, believing in their innocence that so long as there are plans and specifications to go by, all contractors must do the work alike. That is where a firm stand must be taken by the architect if he is to avoid after-trouble. When everything else fails, if he will insist upon the owner assuming all responsibility for the finish and stability of the work in case contractors of his choice are given the work the owner will think twice before signing such a stipulation.

A lesson can be learned about team work by viewing the methods of the biggest and best architects in the country. To gain the privilege of estimating in their offices in the first place, the applicant must prove his right to be considered in the class of reliability, responsibility and quality. Then, by a process of elimination, those who are not in harmony or sympathy with the methods in vogue at that office are dropped from time to time as this fact is discovered, so that competition is restricted to those who will do the work and do it right, if awarded the contract.

Displacing Stairs

Stairs are being displaced in crowded buildings in eastern cities. In St. Paul, a gigantic building containing twenty-four apartments is being constructed in which an inclined way to take the place of stairs will be used. It will rise from mid-cellar to attic, with one turn to the incline between floors, making a three-foot rise in sixty feet. Each floor has been laid out in apartments

School Ventilation

(A paper Read Before the City Council by a Local Architect)

AIR for schoolrooms and auditoriums should never be passed through furnaces for the reason that furnaces are liable to warp and get out of shape and when this occurs the gas from the combustion of fuel leaks into the fresh air ventilating currents and poisons the air in the schoolrooms and causes a disturbance of the nervous systems in the pupils. They become drowsy, stupid, have headaches, and, if long continued, become infected with catarrh and eventually consumption. It has been stated by eminent authorities that nine-tenths of all cases of catarrh are caused by bad ventilation in schools. Catarrh and consumption are never caused by good ventilation.

Furnaces are installed by two kinds of heating contractors, one dishonest, and one presumably honest. The dishonest heating contractor will install a light-weight furnace and place in faulty ventilating ducts, or ducts of insufficient sizes. The light-weight furnaces will average 1,200 to 1,500 pounds in weight. They usually last one year and do well if they give service that long, but every year they are continued in service from the very start they become a menace to the health of every child attending a school where such a furnace has been installed. True, the furnace may have been installed by an expert in heating and ventilating, and air forced into the different rooms with a large fan driven by the latest electric motor, and the daily papers tell of the wonderful heating and ventilating plant installed by so and so in such and such a school, and the school board fondly believe they have purchased the best possible for the taxpayer and his children. But the truth is they have truly made their school building a breeding-place and hotbed for disease. It takes a child of strong constitution to stand the shock of this kind of ventilation. If it came to a question of the survival of the fittest it might be of some value, but most children struggle through it and some of them have the effects with them all their lives of the refined cruelty caused and inflicted by the dishonest but smooth heating and ventilating expert and his wonderful defective apparatus.

The honest furnace, weighing not less than 2,500 to 3,000 pounds, will be installed by the heating contractor who really wants to give value received. This furnace may also have a fan to force the air in the rooms which will also be driven by the latest style electric motor. This furnace, being of heavy weight, of superior construction and installed by a heating contractor (who may not know so much when it comes to a scientific explanation of air currents to a listening school board), gives fairly good service, due more to the honesty of the heating contractor for really being honest enough to buy and install a superior furnace built sufficiently strong and substantial to stand the severe strain of the furnace fire without starting the joints so that the combustion gases could not mix with the fresh air ventilating currents going to the school rooms for breathing purposes. While this kind of a furnace will give fairly good service it is not wise to install furnace heat, both on account of the risk of poisoning the ventilation and the danger from fire. Also it is the most expensive heating system for fuel. One or two heating seasons supply of fuel alone will pay the entire cost of installing a first-class steam-heating plant.

The accepted and authorized system of school ventilation by eminent authorities is the passing of the air currents over steam coils at a temperature of 85 degrees F., reaching the breathing line at a temperature of 68 to 70 degrees F. in the school rooms. The air being forced into the rooms with a fan driven either by an engine or electric motor; thirty cubic feet of fresh air per minute per pupil, being the minimum amount required. One advantage the steam coils have over the furnace system is the fact that there is absolutely no chance for the ventilating air currents being poisoned by combustion gases. The steam boiler would be outside the building and many feet away from the fan chamber. The steam being carried to the fan chamber by large steam pipes. There is this danger, however, the air may be overheated, that is to say above 90 degrees; 85 degrees being the most that air to school rooms should be heated. The boiler and steam coils should be of sufficient capacity for heating the air to 85 degrees, allowing thirty cubic feet to each pupil per minute; the air to flow into the rooms at a velocity not exceeding seven feet per second.

If the proper size boiler has been installed with sufficient radiation surface and the air brought at a height from the ground of at least fifteen to twenty feet, an ideal heating and ventilating plant, meeting the approval of every-day practice, will result.

However, notwithstanding, this is not the ideal ventilating system par excellence. The proper way to warm and ventilate a school room is to bring the air direct into the school room through housed radiators from the outside and sucking the foul air from the school room with a fan—instead of forcing the air into the room with the fan. Just reversing the operation so to speak. The advantage of the direct indirect fan-drawn air is the fact that there is no danger of overheating as the air passes directly into the school room through the radiators and is not warmed to more than 75 to 80 degrees. Consequently the air comes into the school room under more normal conditions, which makes for better health of the pupils than fan-forced air at much higher temperature. Please understand the more air is heated the more it becomes rarefied and expanded; consequently gets away from the very results desired.

By exhaustion sucking the air from school rooms the windows can be opened in warm weather and still the fan draws the foul air from the school room, even when it is practically an open-air school room. You can never do this with a fan system that forces air into the school room. When the windows are closed you can draw your fresh air through the radiators and bring directly and at once to the pupil air heated to the right temperature and do it with less expense than any other system known.

Air for school rooms and places for public assemblages should be brought from a height above the ground to insure its purity from dust.

Air for school purposes should never be warmed more than 85 degrees F., when passing over steam heat coils.

School Ventilation

The ventilating air currents passing over hot iron or steel plates of the furnace to be heated meets with the temperature of these hot plates whatever it may be, and most generally it is as high as fifteen hundred degrees and often more. These red hot plates precipitate the oxygen in the air forming oxides of iron on the iron plates. The air being heated to many times the breathing temperature of school rooms is much disturbed and its good qualities taken away from it before it reaches the school room. This fact alone is the cause of many cases of nose, throat and lung diseases. Then when you add another factor to the overheated air, which is generally lost sight of altogether, and that is the leakage of combustion gases from the combustion chambers of the furnaces, especially light-weight furnaces. This com-

bustion gas from the fire, leaking into the ventilating fresh air currents, adds poison in its most insidious form to the already many times overheated air which is being forced into the school rooms, with a power driven fan. It would be better to have no furnace and no fan, and a simple direct indirect system of steam heating in the school room, with fresh air inlets to radiators, or open windows where the child will get at least ten to fifteen cubic feet of good air per minute, than to get thirty cubic feet of many times overheated, expanded, rarefied, moisture extracted air, poisoned with what gas may leak into the ventilating currents from the combustion.

The air in passing over steam coils in a steam-heating system also comes in contact with the hot radiator plates. As water boils at 212 degrees F., when steam begins to form, it is safe to say the air passes over coils heated to 300 to 500 degrees F., so that in steam-heating systems the ventilating air currents passing over coils, never reach that degree of heat and disturbance and never get poisoned with combustion gas as with the furnace systems.

Tests of furnace air entering school rooms should be frequently made to determine whether gas is leaking and mixing with the ventilating fresh air currents; and the furnace joints looked after. Tests should be made of the quality of air entering a school room—quality is just as much of an essential to health as quantity, and it is much better to have pure air even if it is necessary to open the windows to get it.

It has been shown in a number of cities that open-air school rooms have proven highly successful. The pupils using them studying harder, learning more, have better health, and more energy in them than children of closed window, air-heated school rooms. The time has arrived when open-air windows are being installed in new buildings so that the entire window opening can be utilized and the rooms converted into fresh-air school rooms in a moment's time. The present old style sliding windows permit of only half the window being opened, but it is much better to get the windows half opened and have a half-way fresh-air school room than a poisonous, gas-laden, vitiated-air, closed-window school room.

Poisonous Gases From School House Furnace Heating

Due to the light weight of material used (steel or iron) in the construction of cheap furnaces, the parts becoming overheated they will expand, loosening the rods and bolts holding together the firebox which becomes viciously defective by the separation between the firebox and hot-air ventilating ducts upon which the hygienic integrity depends, and become badly loosened, warped or broken. As a result the entire occupants of the school room are bathed in an atmosphere of dilute flue gases. This produces the sensation of oppression. Other mental disturbances are said to be typical of acute carbon monoxide poison; causing headache, throat irritations, coughs and even diphtheria; also insomnia is caused by this tainted atmosphere.

Flue gases contain especially when the combustion is incomplete, considerable amounts of sulphurous oxide and carbon monoxide, both distinctly poisonous and dangerous gases.

The hot air furnace, often praised for its ventilating effects, when properly operated and in perfect condition, may at any moment become a distinct menace to health.

The "old school doctors" yet claim that diphtheria is induced and augmented by kerosene lamp combustion, which emits the same kinds of gases as an imperfect furnace does.

Air Composition of

Air is not a simple substance but a mechanical mixture. Oxygen and nitrogen are present very nearly in the proportion; one part oxygen to four parts of nitrogen by weight. Carbonic acid gas, the product of all combustion exists in the proportion of three to five parts in ten thousand, in the open country. Water in the form of vapor varies greatly with the temperature and the exposure of the air to open bodies of water. In addition there are generally present in variable but small quantities, ammonia, sulphurated hydrogen, sulphuric, sulphurous, nitric and nitrous acids, floating organic and inorganic matter, and local impurities. Air also contains ozone which is a peculiar active form of oxygen. Also constituent gases have been found in small quantities.

Air Required for Ventilation

The amount of air required to maintain the standard of purity of the school room can be very easily determined provided we know the amount of carbonic acid given off in process of respiration. Experiments show that the average production of carbonic acid by an adult person at rest is about .6 cubic feet per hour. If we assume the proportions of this gas as 4 parts to 10,000 in the external air and as to allow 6 parts to 10,000 in an occupied school room, the gain will be two parts in 10,000 or in other words there will be 2-10,000 equals .0002 cubic feet of carbonic acid mixed with each cubic foot of fresh air entering the room.

Therefore, if one person gives off .6 cubic feet of carbonic acid per hour it will require .6 divided by .0002 equals 3,000 cubic feet of air per person to keep the air in the room at the standard of purity assumed, that is, 6 parts of carbonic acid in 10,000 of air.

Therefore, if the ventilation from artificial means is defective and supplies a heavy percentage of carbonic acid, carbon monoxide, sulphurous oxide and other poisonous gases, together with many times over-heated, expanded air, persons in an occupied school room are in constant danger of a breakdown in health, causing numerous diseases which in many cases will follow them through life.

Architects Cannot Claim Mechanics' Lien

According to a decision rendered by Judge McInnis in the suit of R. McKay Fripp, architect, against H. Clarke, to recover on a lien in connection with the preparation of plans for a residence, an architect in British Columbia, under the existing statutes, can not register under a mechanics lien.

Mr. Fripp claimed a lien for payment for the preparation of plans and specifications for a residence being erected in Point Grey. His claim decided adversely to the claimant. Up to the present time it has been assumed that an architect could claim a mechanics lien judgment in common with the other trades mentioned with building construction.

His Honor, in giving judgment, pointed out that the Ontario act was much broader than the British Columbia statute and that an architect's claim to a lien would not be successfully established in this province, in his opinion.

The point is a new one in British Columbia. A case was heard some time ago where an architect sued for a lien, amounting to some $6000, in connection with the Leigh Spencer building, but the issue as to the architect's statutory right to claim a lien was not taken.

New American Architecture

An Interesting Comparison of Some of the Old and Insurgent School of Design

In an interesting article on some of the bold things that Western architects have undertaken on their own initiative, and especially "the out-of-the-ordinary style that has been developed by the Chicago School of Architects," Charles S. White in writing for "Country Life in America," sets out the following parallel column comparison of the ideas of the conventional and "insurgent school" which will interest all house designers professional or otherwise:

Insurgent

(1) Main floor frequently consists of three rooms—living room, dining-room and kitchen. Frequently these three are contained in one large room, with wings for dining-room and kitchen, screened from the living room. The library is usually part of the living room, and all parts of the house are in close inter-relation instead of each being partitioned separately.

(2) Floor plans and elevations are in harmony, that is, the exterior of the building reflects its interior arrangement, so that one viewing the building from outside might guess its interior arrangement.

(3) Rooms are often "articulated," that is, each department if the house is in a separate wing, the kitchen being separated from the dining-room wing, the living room from the kitchen, and so on.

(4) Windows, arranged in groups—usually casements, opening outward.

(5) Windows and window groups are often integral features of the structure. A house is constructed around the windows.

(6) Interior walls and ceilings are usually tinted and treated architecturally with casings, moulded or plain, applied to the walls in patterns dividing each wall into one or more panels. Pictures are used sparingly for decoration, and then in many cases they are murals, applied architecturally.

(7) Furniture is usually designed especially for the house, ordinarily commercial, "ready made" furniture being unadapted to these rooms.

(8) Frequently houses are built on a stone, concrete or wooden base, there being no "water table" or underpinning line between ground and first floor.

(9) Decorative glass is largely used at windows, consisting of conventional, geometric, or flower forms patterned in metal-bar or grille.

(10) Facades are frequently made up of piers, with curtain walls between, pierced by running groups of windows. Horizontal lines of cornices, window sills and window caps are frequently accentuated by extending these lines entirely around the building.

Regular

(1) Any number of rooms is provided, including hall, living room, dining-room, kitchen, reception room and library. Each room is separated from others by partitions, though often connected by means of wide openings.

(2) In the best work of the regular school there is a close relation between the outside and inside of the building, though not so intimate as in insurgent architecture.

(3) The floor plan is usually conceived as a sequence or rooms arranged within a parallelogram with or without wings.

(4) Windows, single or in groups; may consist of ordinary windows, casements, or both.

(5) Windows and window groups float on a background formed by the walls of the house wherever the exigencies of the problem or the fancy of the designer dictate.

(6) Interior walls and ceilings are treated in hundreds of different ways—sometimes with wall paper or tint, frequently with wood panels or beams. Pictures are framed and hung as desired.

(7) Any tasteful furniture may be used, though sometimes furniture is made to order, as in insurgent houses.

(8) Houses are of all types, some with and some without an underpinning.

(9) All sorts of windows are used, chiefly plain glass.

(10) Facades are handled in the variety of ways familiar to most observers.

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Inaugurate "Grouch" Meetings

Financial Secretary Hughson, of the Portland Builders' Exchange, has inaugurated a novelty. This he denominates a "grouch meeting." The first was held July 10th at 8 p. m., characterized on the bulletin board: "One grouch apiece and no back talk." The object was to form a sort of "get-together" session, wherein petty differences might be adjusted to bring about harmony. Director Bullock perpetrated an original poem on the occasion.

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Gothic

The term Gothic is so associated in our minds with the wonderful cathedrals of medieval Europe, with the pointed arch, with foliated circles, with grouped and clustered mouldings, with the ribbed vaulting and the masses of vivid, even though rude carving; the word is so full of meaning in all its associations that it is difficult to realize that the word "Gothic" first appears in English about the close of the seventeenth century, and then as a term of disesteem. It was used scornfully by such men as Evelyn, in his diary, and even Sir Christopher Wren, master architect that he was, seemed to have no appreciation of the medieval worker.

The Renaissance builders had coined the term much earlier. It is curious to read Vasare, where, speaking of the style "invented by the Goths and Vandals who overthrew the Roman Empire," he says: "There arose new architects, who, after the manner of their barbarous nations, erected buildings in that style which we call Gothic."

To us, Gothic seems to mean detail and the manner of building, rather than the principle of construction. It means vertical lines, tracery, the pointed arch carried to great height, whether the weight is suspended on slender piers with the thrust caught and divided by the flying buttress, or if the building be really carried by a more or less solid wall and sturdy piers.

We are told, as to its early developments, that, "like all the other nations of Europe, France, and later England, were trying to solve the same problem, that of placing a stone roof on the thin walls of the early Christian basilicas," though we know many of the early roofs were of wood.

Another authority speaks of the rib vault as the generating principle of Gothic architecture, and gives the prosaic reason for its use, that the rib arch could be constructed practically without centering. So the rib vault was invented in Lombardy as a simple device to economize the use of wood.—Construction Details.

Industrial Publications

A half-tone of the Carnegie Library, at Howard University, Washington, D. C., forms the cover illustration for the June issue of "Roofing Tin," published by the N. and G. Taylor Co., Philadelphia. This structure is roofed with 7,500 square feet of 1X "Target and Arrow" roofing tin, manufactured by the N. and G. Taylor Co.

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A Lincoln Souvenir

Berger Bros., 186 Broadway, recently exhibited in their window a souvenir of President Lincoln, which attracted much attention. A placard, to which was attached a piece of old-fashioned wall paper, bore this announcement:

"This piece of wall paper is from the room in which Lincoln died, April 15, 1865, 516 Tenth Street, Washington, D. C. Presented to Mr. Ben Berger, by O. H. Oldroyal, Custodian, who preserved it while repairs were being made to the room."

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Another Bed Novelty

President Lawrence Holmes, of the Holmes Disappearing Bed Company, and the inventor of that great modern convenience, has patented and is now manufacturing a new movable upright bed. This may be moved readily to any part of a room, and concealed behind a canopy when not in use. It is unattached, standing on its own base. Hotels and apartment houses, when economy of space is a desideratum, have shown a demand for the new bed. S. B. Cooke, local manager for the company, has the bed on exhibition at the display rooms, suite 422-3-4 Failing Building, and invites public examination. Commendable features regarding this bed include the ease with which it is handled, economy of space, sanitariness and absolute safety.

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Favors Bennett Plans

Mayor-elect Albee, of Portland, announces that it will be the policy of the city to follow, as far as practicable, the Bennett Greater Portland Plans in future municipal development. By gradually working along these lines much impetus can be given to carrying out the designs suggested by the Bennett plans during the life of the new commission, which will cover the next four years. After such a start has been made, it is not likely that haphazard lines will be followed in the future. Indeed, it is highly probable that future commissions will continue the same policy. Rome was not built in a day, and although we will never trod in the dust of dead Caesars, Portland will gradually be transformed under the Bennett plans into a most beautiful city. "Old things shall pass away and all things shall become new." In the evolution, the Greater Portland of the future, in its wonderful natural settings of snow-capped mountains, verdure-coered hills, stretches of fir-clad areas and two magnificent rivers, will make of it the show city of the Pacific Coast. Could opponents to the Bennett plans carried out, see Portland twenty-five years hence as it will be, they would become enthusiastic converts to the idea.

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The Man: "What kind of a bungalow can you give me for $3,000?"

Draftsman: "Do you want one to live in or just refer to?"

Vol. 1, No. 45, of the Harriman Magazine, "The Tooter," has been received. It devotes itself to the interest of the Hood River section. It is well illustrated, and the contents are bright and breezy.

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Portland's Building Permits

The total value of building permits for the first six months of the year were $7,399,895. For the corresponding period in 1912 the amount was $8,798,266. The building permits for June, 1913, were valued at $960,135.

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There is quite a decided increase in the use of face brick in buildings over the country. The buildings being erected in the smaller towns are using this material to a greater extent than ever before, and its superiority is being generally recognized by all those who have to do with the building business.

The Pacific Face Brick Company, Portland, Oregon, manufacturers, have recently received orders for face brick to be used in the following buildings: Kenton School, Portland, Ore.; Odd Fellows' Building, Tillamook, Ore.; Knights of Pythias Building, Albany, Ore.; Carnegie Library Building, Albany, Ore.; Hospital, Aberdeen, Wash.; Bank Building, Lebanon, Ore.; Title and Trust Building, Portland, Ore. They will also furnish their Hollow Clay Building Blocks for the Piedmont Presbyterian Church in this city.

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Portland's Lumber Shipments

A study of the figures covering Portland's lumber shipments for the past three years is of interest. For the fiscal year ending June 30, 1913, the total exports were 145,509,871 feet, valued at $1,712,047; for the fiscal year 1911-12, 88,244,430 feet, valued at $960,233; for the fiscal year 1910-11, 104,056,876 feet, valued at $1,249,354. The coastwise shipments for the fiscal year 1912-13 were 196,780,604 feet; year of 1911-12, 164,923,690 feet; year 1910-11, 108,087,482 feet; year 1909-10, 102,891,200 feet. The grand total of lumber shipments, export and coastwise, for the fiscal year of 1912-13, amounted to 342,290,475 feet; year of 1911-12, 253,168,120 feet, year of 1910-11, 212,144,358 feet. Portland shipped out to foreign countries and to California ports from July, 1910, to July, 1913, the enormous total of 807,602,953 feet—ample proof that it is the greatest lumber shipping port in the world. The shipments for June, 1913, amounted to 35,396,417 feet.

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In the fireproof shafts of a Parisian theater concrete spiral stairways for the use of firemen have been installed.

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STATEMENT OF OWNERSHIP, MANAGEMENT CIRCULATION ETC., OF THE PACIFIC COAST ARCHITECT

Published Monthly at 725 Chronicle Bldg. San Francisco Calif.

Recently moved from 803 Lewis Bldg. Portland Oregon.

Manager, Secretary and Treasurer [illegible]

Publishers [illegible] COAST PUBLISHING CO. Inc.

[illegible] Chronicle Bldg., San Francisco, California.

The owners holding one per cent [illegible] Drummond, A. M. [illegible] mortgagees or other security holders.

[illegible] DRUMMOND

Manager, Secretary and Treasurer

Sworn to and subscribed before me this [illegible] 1913.

(Seal) [illegible]

Notary Public, San Francisco, California.

My commission expires Jan. [illegible]

The American Rolled Gold Company of Providence, R. I., has the contract to place $30,000 in heavy gold leaf upon the copper roof of the tower of the new Woolworth Building, in New York. Cass Gilbert, the architect of the building suggested this lavish adornment.

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Plumbers Active for Comfort Stations

The state association of master plumbers of California recently became active in a campaign to secure the establishment of public comfort stations and the installation of sanitary public drinking fountains and other necessities in every city of the golden state. The executive board of that organization, including Frank J. Klumm, president; Edward W. Crowell, vice-president; Wm. F. Wilson, treasurer; Thomas Haverty, William Rowe, Charles H. Julian and John Cahill, trustees, and John L. E. Firmin, secretary, is presenting to every municipality in the state of California, the matter of the importance of adequate sanitary appliances, and particularly the desirability of the establishment of public comfort stations. In a recent communication signed by the state association of master plumbers of California, by its executive board, addressed to the mayors of every large city in the United States, it was stated:

"This is most respectfully addressed in the belief that you realize that public conveniences or comfort stations and sanitary public drinking fountains, are sanatory and sanitary necessities; that they exert a powerful influence in the advancement of morality, and that the necessity for these public utilities is proportionate to the density of the population of a community.

"The California Master Plumbers' Association is carrying out a campaign for the purpose of bringing this important subject to the attention of municipal and other authorities throughout the United States, and desires to learn what has been done in your city, and what is in contemplation relative to public convenience stations and drinking fountains."

To this communication to the mayors to whom it was addressed was attached a blank form of questions with provisions for answers, which covers every phase of the subject of public convenience stations and drinking fountains. By possessing this data, the state association of California will be able to "show the way" of modern and progressive sanitation in every city of the United States to the municipalities of a state which is favored with an aggressive and progressive association of master plumbers. This action on the part of the California association is one of interest to the whole plumbing industry.

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Personals and Trade Notes

C. E. Troutman, an architect of Aberdeen, Wash., was a recent visitor in Portland.

The firm of Reid Brothers, Architects, is now represented in this city by Mr. Watson E. Reid. Their office is as formerly, in the Yeon Building.

Walter Claussen of the architectural firm of Claussen & Claussen is on an extended trip through British Columbia.

Architects Bebb & Mendal have returned to their former location in the Denny Building, Seattle, which was recently partially destroyed by fire. They are in suite 503.

Architect A. P. Merrill, who was formerly located at 728 Tacoma Building, Tacoma, is now located at 411 Savage-Schofield Building.

John M. Godwin, Architect, has opened offices in suite 84, Hutchinson Building, Vancouver, B. C.

Prof. R. H. Dobell, head of the Department of Architecture at the Oregon Agricultural College, was recently in Portland.

The Columbia Brick Works will furnish the partition tile for the Northwestern Bank Building and Pittock Block.

The Oregon Dennison Block Co. has been awarded the contract for interlocking hollow tile for two dry kilns to be built for the Booth Kelly Lumber Co.

The Oregon Dennison Block Co. received the contract for the interlocking hollow tile to be used in the warehouse of the Rogue River Fruit & Produce Association at Medford, Ore.

J. A. Drummond, Pacific Coast representative of the N. and G. Taylor Company, Philadelphia, has returned from a successful business trip through the Northwest. Mr. Drummond's headquarters are 725 Chronicle Building, San Francisco.

Architect Lyman Farwell, Los Angeles, Calif., has opened offices at 617 Storey Building. Mr. Farwell was formerly associated with Architect O. P. Dennis, with offices in the Fay Building.

Architects Otto H. Neher and C. F. Skilling, Los Angeles, have moved their offices from the Pacific Electric Building to 708-09 Garland Building.

Architect Robert D. Farquhar, with offices in the Van Nuys Building, Los Angeles, is on an extended visit to Italy, France, Spain and the Mediterranean countries, combining pleasure with a study of early European Architecture.

Architect L. C. Mullgardt, with offices in the Chronicle Building, San Francisco, has returned from an extended trip to the Eastern states.

Architect G. Albert Landsbury, with offices in the Gunst Building, San Francisco, has returned from a business trip to Salt Lake.

Thos. Bilyeu, President of the Portland Concrete Pile Co., with headquarters in Portland, Oregon, was a recent visitor at their San Francisco office.

Architect Thos. W. Mawson of London, England, is in Vancouver, B. C. Mr. Mawson designed the plans for the improvement of Stanley Park.

Architects Horel and Roberts, Vancouver, B. C., have moved their offices from the Dominion Building to new quarters in the Welton Building.

Architect A. Wesley Eager of the firm of Eager & Eager, Los Angeles, is on a trip to his former home at Hamilton, Ontario. The return journey to Los Angeles will be made by way of South America.

Architect Willis Polk is on a two months tour which will take him to England, France and Spain, as special Portola Commissioner.

Architect Walter D. Reed, with offices in the Oakland Bank Building, Oakland, Calif., has returned from a two weeks vacation spent at Truckee, Calif.

The Tuec Stationary System of Cleaning, which entered the vacuum cleaning field in this territory last September, seems to be meeting with much favor. C. H. Wilder, manager, reports having the contract for the Morgan Building, designed by Messrs. Doyle & Patterson; the Platt Building, designed by Messrs. Whitehouse & Fouilhoux, and the Broadway Building, designed by Messrs. MacNaught & Raymond, all of this year's construction.

His Job

"How are the plans for your new house coming along?"

"Splendidly. My wife has finally laid out all the cupboards she wants, and now all the architect's got to do is to build the house around them."—New Orleans Times-Democrat.

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A Resume

CALIFORNIA

Theater—Berkeley. Architect A. W. Cornelius has plans prepared for a reinforced concrete theater building for Turner & Dahnken. The building will be 173x175 feet in size, and cost $150,000.

Store and Flat—San Francisco. Architect Henry Shermund prepared plans for a two-story frame flat and store building for J. B. Catana.

Club Building—Sacramento. Architect Washington J. Miller has been commissioned to prepare plans for a building for the Native Sons at Sacramento. The building will be either four or five stories in height, constructed of reinforced concrete.

Apartment House—Los Angeles. Architects R. B. Young & Sons are preparing plans for a three-story brick apartment house for Dr. E. C. Manning.

High School—Los Angeles. Architect Geo. W. Eldredge has been commissioned to prepare plans for an $80,000 high school for Huntington Park District.

Hotel—Los Angeles. Plans are being prepared by Architect E. W. Bongmeyer for a seven-story hotel for E. Rabin.

Loft Building—Los Angeles. Architect A. F. Rosenheim has completed plans for a five-story loft building for the Bensinger Estate.

Apartment House—San Francisco. Plans are now being prepared by Architects Rousseau & Rousseau for a four-story brick apartment house for Martin S. Shaw, to cost $60,000.

School—Hughson. Architects Stone & Wright of Stockton prepared plans for a one-story $20,000 brick school building.

Bank and Office Building—San Francisco. Working drawings are now being prepared by Architects Stone & Wright for a ten-story steel frame building for the Commercial Savings Bank of Stockton, to cost $150,000.

Office Building—San Francisco. Architect Frederick H. Meyer is preparing working drawings for the eight-story office building for Trowbridge & Perkins. The building will be 67x120 feet in size, steel frame, to cost $200,000.

Hotel—Long Beach. Architects Kysor & Bigger of Los Angeles have been commissioned to prepare plans for a ten-story reinforced concrete hotel with seven hundred rooms for the Oxford Investment Co., at a cost of $700,000.

Residence—Oakland. Architects Milwain Bros. are preparing plans for a $25,000 residence for Mrs. A. J. Larkey.

Residence—San Francisco. Plans are being prepared by Architects Bakewell & Brown for a two-story brick veneer residence for Mrs. L. C. Avaneli.

Physicians' Building—San Francisco. Architects Ward & Blohme have prepared preliminary plans for a twelve-story building to be used by physicians.

Store and Hotel—Fresno. Architects Swartz, Hotchkin & Swartz have prepared plans for a two-story brick building, 50x100 feet in size, to cost $20,000.

Loft Building—Los Angeles. Architects John C. Austin and W. C. Pennell are preparing plans for a thirteen-story loft building for the Mason Estate.

Residence—San Francisco. Architect Kenneth McDonald Jr. is preparing plans for a $75,000 residence for Lewis Sarom.

Warehouse—San Francisco. Plans have been completed by Architects Bakewell & Brown for a three-story brick warehouse building, to cost $55,000, for Orville Pratt Jr.

Apartment House—San Francisco. Plans were prepared by Architect W. G. Hind for a $15,000 apartment house, 44x95 feet in size, for Mrs. Sarah Pickard.

Office Building—Los Angeles. Architects Morgan, Walls & Morgan are preparing working drawings for a steel frame store and office building, 121x150 feet in size, for Wm. G. Keickhoff.

Residence—Berkeley. Architect John Hudson Thomas is preparing plans for a $10,000 brick veneer English residence for Dr. Geo. P. Wintermute.

Fraternity Building—Berkeley. Architect W. C. Hays, San Francisco, prepared plans for a $20,000 fraternity house for the Alpha Tau Omega Society.

Hotel—San Francisco. Architect Edward B. Seely is preparing plans for a ten-story steel and concrete hotel for Frank W. Tiller. The building will be 50x150 feet in size, and will cost $150,000.

Apartments—Sacramento. Architect Wm. Wallmer is preparing plans for a three-story apartment house for V. G. Johnson.

Hospital—Los Angeles. Plans have been prepared by Architects Garrett & Farrell for a four-story building, 141x60 feet in size, for the Methodist Hospital Association.

Apartment Houses—San Francisco. Architect Albert Farr prepared plans for a group of five frame apartment houses to be built for the Metropolitan Investment Co. at a total cost of $60,000.

Church—Berkeley. Architect James W. Plachek has completed plans for a $15,000 frame and plaster church.

Machine Shop—San Francisco. Plans are being prepared by Architects Welsh & Carey for a machine shop, 25x70 feet in size, of steel and brick construction, for J. P. Ford.

Apartment House—San Francisco. Architects Falch & Knowles prepared plans for a $12,000 three-story frame apartment house, 25x125 feet in size.

Garage—Fresno. Architects Swartz, Hotchkin & Swartz are preparing plans for a one-story concrete garage of Mission style, to cost $12,000, for Thos. Patterson.

Store and Office—Santa Barbara. Architect J. Corbley Pond prepared plans for a four-story reinforced concrete store and office building, 100x230 feet in size, for John S. Hawley.

Apartments—Fresno. Architects Starbuck & Clark prepared plans for a bungalow apartment house for E. M. Dinson.

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OREGON

Garage—Architects Jacobberger & Smith prepared plans for a private fireproof garage to be built for Dr. A. J. Giesy.

Residence—Architects Root & Hoose prepared plans for a $5,000 residence to be erected in Laurelhurst for the Investors' Building and Trust Co.

Warehouse—Plans were prepared by Engineer Wm. F. Spring for a $40,000 concrete warehouse and cold storage plant to be erected at Medford, Oregon, for the Rogue River Fruit and Produce Association.

Business Block—Architect W. B. Bell has been commissioned by Fisher & Thorsen to prepare plans for a three story brick building, 100x100 in size, to be built on upper Washington Street. Will be used for stores and rooming house purposes.

Residence—Architect W. B. Bell prepared plans for a modern $3,000 frame residence for the Rev. Henry Leeds.

School—Plans were prepared by Architect Newton C. Gaunt for a two-story frame school, to cost $15,000, for School District No. 41, Coos County.

Residence—Architects Foulkes & Hogue prepared plans for a $4,000 residence to be built on Portland Heights for James McKinnan.

Summer Cottage—Plans were prepared by Architect R. N. Hockenberry for a modern beach cottage to be built for Harry Hemblet at Gearhart Park.

Bungalow—Architect R. N. Hockenberry prepared plans for a five-room rustic riverside bungalow for Ralph Hahn.

Rescue Home—Plans were prepared in the City Building Inspector's office for a group of eleven buildings to be erected for the Louise Rescue Home.

Store Building—Architect F. E. McClaran prepared plans for a two-story brick and concrete building to be built for J. Jacobson at Gresham.

School—Plans were prepared by Architect George R. Kingsberry for a two story frame school building to be built at Banks.

Library—Plans were completed by Architects Johnson & Maver for a Carnegie Library for the city of St. Johns. Will be a one story and basement brick building of Colonial design.

Flat—Architect F. E. McClaran prepared plans for remodeling a two story frame residence into a two-flat building for H. E. Harris.

Residence—Architects Claussen & Claussen prepared plans for a two-story frame side hill residence to be erected on Arlington Heights at a cost of $6,500.

Masonic Temple—Plans are being completed by Architect C. C. Robbins for a three-story $40,000 brick building 88x100 in size, for the Marshfield Masonic Lodge.

Bungalow—Architects Claussen & Claussen prepared plans for a five room bungalow for Mrs. Letitia Smith.

Factory and Office—Architects Jacobberger & Smith prepared plans for a two story concrete factory and office building, 60x140 in size, for the Doernbecher Manufacturing Co.

Bank Building—The First National Bank of Forest Grove has commissioned Architect W. B. Bell to prepare plans for Gaunt for a three story stone bank and office building, 50x65 feet in size.

Garage and Dance Hall—Architect Robert T. Tower is preparing plans for a three-story brick building, fireproof in type, for M. M. Ringler. The building will cost about $60,000.

Bungalows—Architect Earl A. Roberts is preparing plans for two modern five-room bungalows to be erected for the Provident Trust Co. in Rose City Park.

School—School Architect F. A. Naramore prepared plans for a two-story reinforced concrete school building for Sellwood District to cost $40,000.

Residence—Plans were prepared by Jacobberger & Smith, Architects, for a modern two-story, nine-room frame residence for Robert Liese.

Church—Architects Tourtellotte & Hummel are preparing plans for a building for the First Methodist Episcopal Congregation of Roseburg, Ore. Will be a one-story and basement frame church and will cost about $15,000.

Residence—Architect Chas. W. Ertz prepared plans for a $3500 residence to be erected in East Moreland for S. H. Thatcher.

Store Building—Architects Emil Schacht & Son are preparing plans for a one-story brick store building to be erected on Twenty-eighth and Thurman streets.

School—Architects Tourtellotte & Hummel have been commissioned to prepare plans for the Cottage Grove High School. Will be a two-story brick, 60x145 in size, with sixteen class rooms and will cost $40,000.

Business Block—Corvallis. Architect A. C. Jenkins of Albany has prepared plans for a two-story brick building, 100x100 in size, to be erected for Charles Hout.

Business Block—Astoria. A syndicate composed of F. I. Dunbar, T. R. Davies, E. Z. Ferguson and J. N. Griffin have purchased 140 foot frontage in the business district and will improve it with a four-story business block.

Residence—Hood River. Architect R. R. Bartlett prepared plans for a modern two-story, nine-room frame residence for Mayor E. O. Blanchtor.

Hotel—Baker. T. A. Barton will erect a two-story brick hotel at an early date.

Hospital—Springfield. Mrs. R. M. Baker is planning to erect a modern three-story hospital building, 38x60 feet in size, at a cost of $100,000.

Bank—Bandon. Architect Benjamin Ostlind of Marshfield has been commissioned by the First National Bank of Bandon to prepare plans for a two-story reinforced concrete bank building, 42x75 feet in size, to cost $12,000.

School—Metolius. Sweatt & Levensque, Spokane architects, have prepared plans for a concrete fireproof school building to cost $8500.

School—Klamath Falls. Architects Veghte & Co. prepared plans for a school building, 28x36 feet in size, for District No. 41.

School—Eugene. Architect J. R. Ford prepared plans for a two-room school to be erected near here.

Bank and Hotel—Sherwood. Frank Cofelt will erect a two-story brick building to be used for banking and hotel purposes.

Lodge Building—Dufur. Architects S. E. Watkins & Son of Newberg have been commissioned to prepare plans for a $14,000 lodge building for the I. O. O. F.

School—Fairview. School District No. 7, Multnomah County, will erect a modern bungalow schoolhouse at a cost of $3500.

Lodge Building—Medford. Architect F. C. Clark has prepared plans for a building for the B. P. O. E. The building will be a two-story brick, 85x85 feet in size, and will cost about $45,000.

School—Culver. Culver school district has voted $6000 bonds with which to erect an eight-room frame school building.

School—Agate Beach. The Agate Beach school district will erect a $3000 schoolhouse.

School—Hillsboro. St. Mathews Church is planning to erect a parochial school on its property here.

School—Gervais. Architect Geo. M. Post of Salem has prepared plans for additions and alterations to the public school building.

WASHINGTON

Remodeling Theater—Seattle. Architect Francis Grant will prepare plans for remodeling the Star Theater at a cost of $70,000.

School—Spokane. Architect Robt. C. Sweatt has completed plans for a $30,000 fireproof school building for Boulevard Park School.

Church—Aberdeen. Architect C. E. Troutman has plans completed for the $15,000 church for the Episcopal Church of St. Andrew.

College Building—Pullman. Plans for two fireproof buildings to cost about $300,000 for the Washington State College have been prepared by Prof. Rudolph Weaver of the architectural department.

Library—Seattle. Architect W. Marbury Somervell has completed plans for Yesler Memorial Library. The building will be a two-story concrete, stone and brick structure and will cost $40,000.

Hospital—Juneau. Architect Julian Everett has completed plans for a four-story, 50x100 feet in size, reinforced concrete hospital to cost $60,000, for the Sisters.

School—Marcus. Architects Sweatt & Levesque of Spokane have prepared plans for a $45,000 school building.

High School—Kapowsin. Architects Heath & Gove, Tacoma, have prepared plans for an $8,000 addition to the high school at this place.

School—Castle Rock. The Castle Rock school district has voted bonds for the purpose of erecting a modern high school.

Bank—Seattle. Architects Beezer Bros. prepared plans for a three-story concrete and brick bank building for the Broadway State Bank, to cost $35,000.

Grain Elevator—Endicott. The Endicott Union Elevator Company will erect a concrete grain elevator.

School—Vancouver. Bonds for $5000 have been voted by school district No. 6 with which to purchase a site for a building.

Depot—Steilacoom. Architects Mahon & Merrill, Tacoma, are preparing plans for a $4000 depot for the Northern Pacific Railway Co.

School—Newport. School District No. 1 voted an $18,000 bond issue with which to erect a modern school building.

Hotel—Montesano. Plans are being prepared for W. E. Crist for a three-story concrete hotel to cost $35,000.

Theater—Anacortis. Architect F. S. Piper of Bellingham is preparing plans for a fireproof theater, 60x100 feet in size, for J. A. Mathesen, to cost $20,000.

Church—Spokane. Plans have been prepared by Architect Chas. T. Diamond and accepted by the Church of Truth for a $12,000 church of stone, stucco and half-timber.

Garage—Seattle. Architects Haynes & Cantin have been commissioned to prepare plans for a garage to cost $250,000 for the Madison Square Building Co. The building will be three stories, reinforced concrete, 240x360 feet in size.

University Building—Spokane. Architect H. G. Ellis has plans prepared for the first building for Spokane University. The building will be one story, concrete and brick, 60x80 feet in size.

Hall—Centralia. The Salvation Army will erect at once a two-story brick building at a cost of $15,000.

Business Block—Aberdeen. W. R. Whiteside announces that he will begin work soon on a two-story building to be used as an undertaking establishment with apartments on the second floor. Cost $20,000.

School—Seattle. School Architect Edgar Blair is preparing plans for a four-room addition to the Warren Avenue school to cost $25,000.

IDAHO

High School—Wallace. Bonds for $55,000 have been voted for the construction of an additional high school building. A two-story brick building, 100x100 feet in size, is planned.

Store—Bonner's Ferry. J. W. Reid will erect a modern two-story brick department store with a thirty-foot frontage.

Business Block—Troy. W. M. Duthie will begin work soon on a modern two-story brick building 25x90 feet in size.

Elks' Building—Idaho Falls. The B. P. O. E. will build a $35,000 club house. Nels D. Porter is chairman of a committee to secure plans.

Elevator—Lewiston. Construction work on a grain elevator with 100,000 bushels capacity will be started at once.

School—Ilo. Bonds for $15,000 were voted by Independent School District No. 1 for building a modern school house.

School—Inkom. Bonds for $15,000 have been voted with which to erect a modern school building.

Court House—Moscow. An election will be held July 22 for the purpose of voting on a $110,000 bond issue to be used in the erection of a court house for Latah County.

Lodge Building—Boise. Architects Tourtellotte & Hummell have prepared plans for a four-story lodge building for the B. P. O. E.

BRITISH COLUMBIA

Hotel—Victoria. Architect Jessie M. Warren has plans completed for an eight-story hotel, 75x25 feet in size, for Adams Bros., to cost $50,000.

Hotel Addition—Victoria. Architect W. Ridgeway Wilson has prepared plans for alterations, to cost $10,000, to the Commercial Hotel.

Residence—Victoria. Architect W. F. Whitehead prepared plans for a $16,000 residence for T. G. McArthur.

Residence—Victoria. Architect A. J. Maclure has prepared plans for a residence at Gordan Head for a Mr. McGaffey.

Apartment House—Vancouver. R. J. Coleman will erect a three-story apartment house at a cost of $60,000 from plans prepared by himself.

Residence—Eburne. Architect R. A. Nicolais is preparing plans for a $100,000 residence to be built for a Vancouver capitalist.

Hotel—Brentwood Bay. Architect H. Horton of Victoria is preparing plans for a $75,000 hotel building for E. E. Phair.

Factory—Vancouver. The American Can Co. will start work at once on a five-story factory building to cost $85,000.

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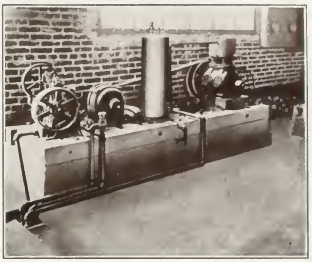

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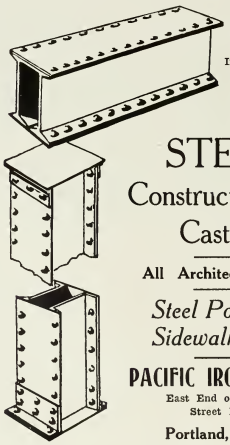

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CALIFORNIA

VOLUME FIVE
NUMBER FIVE

AUGUST, 1913

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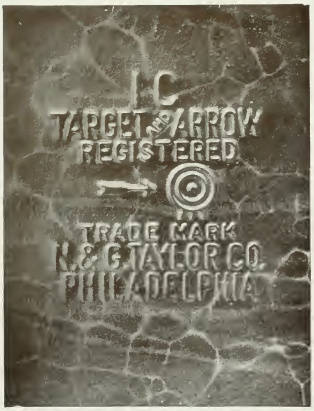

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The illustrated section of this magazine contains several pages showing the plans of the Lincoln Park High School, Tacoma, Washington, designed by the well known firm of architects, Messrs. Heath & Gove, of Tacoma.

They have specified N. & G. Taylor Co.'s Target-and-Arrow for the roof of this building, requiring a carload of over 40,000 lbs., which is already shipped from Philadelphia direct to the building.

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

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Current Comment

Official figures, recently compiled, place the cement production of the United States last year at 83,351,191 barrels, which is a new high record and an increase of more than 3,800,000 barrels in a year.

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At Glendale, Calif., a drinking fountain built of cobblestones was moved on trucks with a donkey engine, to a new location several blocks distant. The fountain weighs two and one-half tons and is fifteen feet high.

❖ ❖ ❖

In the Province of Alberta, Canada, there is an odd Ruthenian village. All the houses are built of logs, with doors of woven twigs, swinging on home-made hinges, with wooden hasps for latches. The roofs are of poles and cross-woven wheat straw, treated with pitch. Not a single nail is used, and the floors are of hewn logs.

❖ ❖ ❖

The total value of new buildings erected in Medford during 1913 will equal $197,000. Civic improvements in the past four years cost $1,854,000. The city now has 20 miles of paved streets, valued at $1,000,000; 30 miles of water mains, worth $250,000; 27 miles of sewers, worth $204,000; 2 miles of storm sewers, worth $25,000; 27 miles of concrete walks, worth $100,000; a 23-mile mountain water gravity system, costing $275,000.

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A jeweler at Winona, Minn., after four years' work, has produced a miniature working mechanical model of his city. It shows all office buildings, bridges, flour mills, churches, factories, river boats, street cars, etc. Tiny manikins and street traffic operated by electricity, give appearance of life and activity. At night the current illuminates the buildings and streets.

Departments Merged

One of the results of the change from former methods in Portland to the commission form of government, has brought about a merger of the City Plumbing Department with that of the City Building Inspector. The combined offices are under the general supervision of Commissioner Robert G. Dieck, while Building Inspector Plummer is actively in control.

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"Emotions in Stone"

George A. Birmingham, in "The Living Age," thus beautifully expresses himself relative to emotions in stone:

"Pillars and arches reach heavenward. The whole mass of stonework climbs to dim, divine heights; but it does so at the cost of ceaseless stress, almost unbearable effort."

"When standing in the nave of Notre Dame one has the feeling that demons are lurking in the shadows. I feel sure that the men who built these great temples felt this. Their gargoyles were not mere grotesques, untimely outbreaks of an irrepressible comic spirit. They represented haunting devils."

"I am repelled at times from these buildings, because they oppress me. I am continually conscious of some vast power which overwhelms me."

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Permanency in Building

An encouraging indication in almost every Western city is the fact that buildings of flimsy and cheap construction are on the wane. Many young cities, by reason of sudden access of population, were compelled by sheer force of circumstances, to use the cheapest material accessible—lumber. This tended to a sort of mushroom-like growth, and could not, by any means, become stable or permanent. Development of business interests, accession of wealth, rendered wooden buildings unfit. Where the demon of fire did not do the work of eradicating them, the advancement in values of the sites they occupied have forced owners to remove and wooden buildings generally. In their place have been reared structures of steel and reinforced concrete. Lumber, for many purposes, is no longer applicable, but the lumber business suffers not a whit, for it nevertheless utilized. The modern tendency is to permanent structures. Iron, steel, concrete, brick, terra cotta and natural stone are becoming more and more popular. With these improved use, there will be a yearly lessening danger of conflagrations, and of course a lessening insurance rate. It is only a question of a few years when American cities will gradually assume that same permanency in their buildings that serves to distinguish the cities of the Old World.

Figures Show Progress

Building construction for the month of July showed a commendable activity in San Francisco. Permits were issued and contracts filed to the extent of $2,055,210 for private construction and contracts were let on the Panama-Pacific enterprise to the extent of $1,689,815, making in all $3,745,025, exclusive of city and government work. This is against $2,134,237 for the month of June, and $2,677,088 for the month of May, including the same items. Of the $2,055,210 for private construction, $1,257,131 was for brick and concrete construction; $661,026 for frame buildings and $137,053 came under the head of alterations and additions. These figures show that in spite of the depression of business generally there is a considerable activity in the building line such as to indicate that there is faith in the future of the city.

Compared with other years the record for July is as follows:

July, 1904	$1,763,939
July, 1905	2,087,965
July, 1906	1,959,290
July, 1907	4,687,516
July, 1908	2,921,152
July, 1909	3,144,482
July, 1910	1,596,613
July, 1911	2,126,720
July, 1912	2,217,215
July, 1913	3,745,025

While $1,689,815 of last month's figures were for the work of the Panama-Pacific Exposition, still the total of private construction runs upwards of two millions. This is a good figure considering that it was vacation period generally and business is dull. From present appearances things ought to look up the last half of the year and assume a more buoyant tone.—San Francisco Pacific Daily Builder.

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Department of the Interior

BUREAU OF MINES

New Publications. (List 21—August, 1913.)

BULLETINS.

Bulletin 59—Investigations of detonators and electric detonators, by Clarence Hall and S. P. Howell. 1913. 73 pp., 7 pls., 5 figs.

Bulletin 61—Abstract of current decisions on mines and mining, October, 1912, to March, 1913, by J. W. Thompson. 1913. 82 pp.

TECHNICAL PAPERS.

Technical Paper 15—An electrolytic method of preventing the corrosion of iron and steel, by J. K. Clement and L. V. Walker. 1913. 19 pp., 10 figs.

Technical Paper 42—The prevention of waste of oil and gas from flowing wells in California, with a discussion of special methods used by J. M. Pollard, by Ralph Arnold and V. R. Garfias. 1913. 15 pp., 2 pls., 4 figs.

Technical Paper 47—Portable electric mine lamps, by H. H. Clark. 1913. 11 pp.

MINERS' CIRCULAR.

Miners' Circular 12—The use and care of miners' safety lamps, by J. W. Paul. 1913. 19 pp., 4 figs.

The Bureau of Mines has copies of these publications for free distribution, but cannot give more than one copy of the same bulletin to one person. Requests for all papers cannot be granted without satisfactory reason. In asking for publications please order them by number and title. Applications should be addressed to the Director of the Bureau of Mines, Washington, D. C.

Architects Hold Picnic

The Spokane Architectural Club held its annual picnic at Hayden Lake, August 20. F. P. Rooney was chairman of the committee in charge of arrangements. The other members of the committee were: H. G. Ellis, H. C. Whitehouse, G. F. Schofield, E. V. Price and H. C. Bertleson.

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Building More Fire-Proof Homes

Is it not time that the fireproof house receive greater consideration on the part of architects and owners? It so happens that a fireproof house is also one practically free from deterioration. There are no rotting timbers, and coal bills are generally lower than with cheap, inflammable construction.

But it is generally thought that fireproofing entails great expense; that any of the accepted safe materials are beyond the purse of the average home builder. That this is not the case is being proven by numberless examples of fireproof construction now under way, after designs of architects who understand how to keep costs down.

At the Chicago cement show, held last January, one of the most interesting exhibits was that showing a typical suburban home in full size and built entirely of fireproof material. It was a true concrete house, concrete hollow tile having been used for wall and floor material, and a stucco coat having been applied for the finished surface.

It is commonly believed that a coating of stucco on a good frame renders a house fireproof. This is not the case. The thin protecting shell is no protection from fire within, and its life is limited. But true fireproof construction with approved materials gives perfect security. Stucco on such a foundation is ideal.

As a matter of fact, the house at the cement show was necessarily built only in part. The depth of the booth being 14 feet, the porch, porch roof and the front wall of the house, including a bay with casement windows off the living room, a casement window off the hall and the entrance were all that could be actually constructed. The balance was painted on canvas by one of Chicago's theatrical scene painters, and gave in perspective not only the house, but a typical suburban setting.

The roof of the home is an important feature that is seldom given sufficient consideration. Where houses are built close together, the danger of fire being communicated from house to house is great, where wood shingles are used. There is perhaps nothing cheaper nor better than the wood shingle, if we disregard entirely the danger from fire, and yet this danger is so real today with our crowded city conditions that the makers of fireproof shingles, of cement-asbestos or tile, of clay or cement are finding a ready market.

In order to carry out in every detail the purpose of the house, a fire-proof roof of asbestos shingles was used, and, while its cost was found to be practically double that of wood shingles, yet this additional cost must be reckoned as a pure investment, there being no depreciation, and the greater safety bringing a real reduction in the annual fire insurance costs.

The home owner should look well to the materials specified by his architect and used by his contractor when building his house. He should be sure that the walls are well insulated, and preferably that they have a double air space for this means a considerable saving in coal and a more comfortable house through the hot summer.—P. D. Van Vliet.

Lighting Systems

There was a time when the majority of mankind awakened from slumbers at 4 in the morning and retired at 8 o'clock in the evening, except on special occasions. Since the gradual improvement of lighting systems, which has now almost reached perfection, it is safe to say the majority of mankind now awakens at 7 and retires at 11 o'clock, except on special occasions.

Whether the new order of things has resulted in any great benefit is a much debated question. It is sufficient for present purposes, however, that the new order of things is the most acceptable to the majority and that it is probably here to stay.

Lighting systems were first considered a luxury. They are now an absolute necessity. This is the golden age of mankind. There is much to do and much to see in this wonderful world, and the introduction of artificial light has made it possible to do and see a great deal more during the natural lifetime of the present generation than was possible several generations back.

The question as to which system of lighting is the most satisfactory, all things considered, is hardly debatable. Electricity is cleaner, safer, healthier, more convenient and in most cities more economical than any other system of lighting. It is not, however, cheap enough to be of practical use for heating and cooking. There has been a great deal of improvement since the days of the old horseshoe carbon light. In fact the increased brilliancy has been a little overdone, so that the brightest electric light now obtainable, also the brightest gas light obtainable, is actually harmful to the sight unless enclosed in ground glass globes or in other ways arranged to diffuse it.

This brings us down to indirect lighting, by far the most practical lighting system for all interior purposes, domestic or commercial. It was thought that when a light of extreme brilliancy had been invented that all lighting problems had been solved, that every part of a room could be made as light as day, and this is really possible, but not practical.

Observe the daylight in your room. If your room is on the north side of the house no direct rays of the sun enter it. Still during the middle of the day you have ample light of a soft diffused nature. On the south side of the house where the direct rays are admitted you will invariably draw your curtain so that the sun will not shine directly into your eyes. Even the direct rays which strike the wall, floor and furniture, are sometimes so brilliant as to create discomfort.

Place a book in the direct rays of the sun and try to read from it, you will find the light blinding and if continued indefinitely would soon ruin the sight. This easily proves that the most practical light is a diffused or indirect light. Therefore, when you place a miniature sun in the middle of a room receiving direct rays from it in all directions you experience an effect that is very tiring to the eyes. When this brilliant light shines directly upon your book or writing paper it is injurious. Since it would not be practical to place the chandeliers outside of the window and attempt to have them shine in, in the same manner, and with approximately the same brilliancy as the sun, it is necessary to keep this miniature sun within each room.

To diffuse the light various kinds of opalescent, ground glass and other shades have been made, but all have proved more or less unsatisfactory. Most of them will shade the light from a greater portion of the room and especially the ceiling, casting a very strong glare immediately below the chandelier, so that when you are in the shadow you have not light enough and when you are in the glare the light is too strong.

One day some bright genius solved all the problems as quickly and as easily as Columbus defeated the laws of gravitation by standing an egg on end, when the sages and philosophers thought it impossible. This genius simply turned the chandelier upside down, and instead of reflecting the light downward against carpets, tables and other miscellaneous things that absorb instead of reflect light, he shines it against the ceiling, simply requiring that the ceiling be of light color, and lets the light fall in a diffused manner, giving a soft glow to all parts of the room, which creates no shadow except directly below things and not much of that. Simple, isn't it? But like all simple things, it must be done right.

The most practical color for the ceiling is a light cream, although other light colors, such as a very light sky blue, have been used and given satisfaction, when enough indirect lighting is provided. These inverted chandeliers which look like ornamental hanging flower baskets suspended by chains, are a varying width and design to suit the requirements of each room and the taste of the owner.

To get the proper amount of light is a matter of scientific figuring by a lighting engineer, who carefully computes the amount of light required to properly light a certain sized room of certain decorations and from his scientific figures determines the width and number of the chandeliers (when the room is large), and how far they should be suspended from the ceiling. Indirect wall lights are also used, but these are not as practical as the drop lights or chandeliers from the ceiling, unless a number of them are placed all about the room, which is sometimes done when the ceiling is low. The new tungsten lights now made by several concerns are a great economy over the old style carbon light, not only in the actual amount of current consumed, but by reason of the fact that fewer of them are required for sufficient lighting purposes.

Suburban lighting systems offer many serious problems. There is no individual lighting plant that will not occasionally give some trouble. The most practical individual plant is a little too expensive for the average suburbanite. Sometimes little colonies of homes will go together on a private plant of this nature, sharing the expense to maintain it either equally or in proportion to the number of light outlets in each house. Between acetylene and gasoline gas plants the latter is advised. When an acetylene plant can be made that is absolutely fool proof it has its advantages over a gasoline plant, but no matter how careful a man may be he is apt to leave the inclosure of his plant unlocked and prying children or servants are bound to make personal investigation to see where the danger lies of which they have been warned so much with usual results. The gasoline gas plant offers the advantage of always having the fuel quickly available, and it can be used for cooking as well as lighting. Most gasoline gas plants are now arranged with the storage tank in the ground outside of the house.

The arrangement of lights for the interior is too complicated to discuss at length in a general way, each room providing its own problems. But these few points should be borne in mind. Always provide switches for all electric chandeliers at convenient doors. Never place a light fixture where a swinging door will strike it or where it is apt to receive a strong draught from an open window. Always provide a small light for each bureau, piano and washstand and preferably two one-

on each side. All chandeliers should be on three-way switches, so that only one light can be turned on when desired, such as one light in the dining room by which to set the table, but still so that all the lights can be turned on at will. Writing desks, typewriters, and the like should always have local lights. Never buy very ornate lighting fixtures. It is a constant care to keep them clean and they do not look as well as plain fixtures of neat design. Black iron fixtures should not be used for they absorb the light when they should reflect it.

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Harmony in Private Buildings

The legal sides of city planning—the police power to control housing conditions, height of buildings and similar matters that are developing in this age of progress—were discussed by Edward M. Bassett of New York before the recent National Conference on City Planning. In a paper which was heard with interest he said:

"Broad exercise of community control of the use of private property is requisite. The city should have the power to impose restrictions on the use of private land so that the community's needs shall be observed. These needs extend not only to sanitation and safe building construction, but include adaptation of buildings to their surroundings, distances of buildings from and relation to streets and public places, creation of zones for industry, business or residence and prohibition or regulation of unsightly objects. The police power is the power of safeguarding the community. This power is entirely distinct from the right of condemnation. The city by its exercise takes no title from the private owners and makes no compensation.

"The courts have chosen to limit the police powers to health and safety on the ground that a more extensive application would violate the constitution both as to taking without compensation, and without due course of law. Yet no one can doubt that the city of the future will need to enforce harmony of buildings, the setting back of buildings in certain areas, the limitation of heights and to some extent the segregation of residential, business and industrial structures.

"The community cannot carry out any worthy plan if a private owner can build any shape, anywhere and for any purpose. The city architect in many foreign cities has the power to disapprove the plans of unsuitable and inharmonious buildings. Modern German cities like Cologne, Frankfort and Dusseldorf have planned and restricted their suburbs as to height of buildings, their use and the proportion of private land to be covered.

"It is unthinkable that the city must compensate all of the private owners if reasonable esthetic restrictions are placed on their use of city land. Yet if the police powers cannot be invoked there is no resort but to eminent domain, which always requires compensation. No city can afford to pay money to all private owners to make them respect community rights, and community rights will at some time extend to regulating advertising signs, harmonizing buildings and segregating industries. Progressive legislation is required, and if all else fails, constitutional amendments must be made. These should be general and extend police powers to reasonable esthetic objects, rather than to enumerate the various forms of community necessities."

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A German vacuum ice machine of convenient size for household use does away with the need of using dangerous acids and can be operated by hand or a small electric motor.

Coast Architects Honored

Four firms of Pacific Coast architects are included in a list of seven that have been selected by the United States Treasury Department as competitors to furnish the plans for the new Portland, Ore., postoffice. The chosen firms are: Bliss & Faville, San Francisco; Ellis F. Lawrence, Whitehouse & Fouilhoux and Doyle & Patterson of Portland; Clinton & Russell, J. H. Friedlander and John Russell Polk of New York.

The Coast architects have just received instructions in regard to what must be included in the plans and general rules governing the competition. The new postoffice building will cost $1,000,000 and will be a two-story structure, covering an entire block.

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Canadian Architects to Meet in Calgary Next

The Royal Architectural Institute of Canada has issued the following call for the sixth annual general assembly of the organization to be held in Calgary in September:

The sixth general assembly of the Royal Architcetural Institute of Canada will be held at Calgary, Alberta, on September 15 and 16. A very interesting programme is being prepared, which will include matters of interest to every architect in the Dominion.

Every Canadian architect is cordially invited and is welcome at all sessions and entertainments, whether a member of the R. A. I. C. or not.

This is the best opportunity to visit Calgary, the city phenomenal, and the Calgary architects have promised a royal reception.

The programme will be sent early in August to all members of the R. A. I. C. and will contain all the particulars concerning the assembly.

The committee of arrangements of the assembly is composed as follows:

J. H. G. Russell, F. R. A. I. C.; G. M. Lang, F. R. A. I. C.; L. M. Gotch, M. R. A. I. C.; W. D. Cromarty, M. R. A. I. C.; and Alcide Chausse, F. R. A. I. C.

ALCIDE CHAUSSE, Hon. Secretary.

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Bricklayer Performs Operation

George Washington, famous leader of revolting armies and first President of his country, has a brand new nose.

The particular George in question is the 16-foot stone statue which stands on the very top of the dome of the court house at Washington, Pa. The delicate surgical operation, replacing a lost feature of his countenance, was made possible by the daring and nerve of Charles Curran, a local brick contractor.

Curran, with his assistants, was making repairs to the dome when he noticed that the nose on the giant statue above him was missing. Taking a ladder and a rope and one assistant he climbed to the top of the statue, where he found that the olfactory organ had been torn away, leaving the father of his country with a decidedly blank expression.

Curran constructed a new nose out of a composition which he himself evolved and which he believes will be as permanent as stone. He then clambered up to the head of the statue and seating himself upon the lofty brow 185 feet above the sidewalk he replaced the lost nose.

Ruskin College

Oxford University is housed in twenty-seven colleges dotted about the ancient city in the heart of Southern England. There is no more beautiful collection of ancient architecture surviving to this day and filling modern uses. The history of about nine hundred years is written in these gray stone colleges and halls.

Among these ancient colleges of stone there stands one of red brick that holds a hundred students. It is but fourteen years since it was founded in honor of John Ruskin, one of the many famous men who loved Oxford as their alma mater. The founder was Walter Vrooman, an American. The new buildings just finished were opened on Washington's last birthday.

To have been graduated from Oxford University has been the hall mark of two hundred generations of students, most of whom belong to the aristocracy of England. Ruskin college was built as "a message from the people of America to the working men of Great Britain." The gift was accepted by and on behalf of plain working men, who were ready enough to give up four years of their life for the higher learning that was there opened to them. They go in and out, shoulder to shoulder, with the sons of the aristocracy, meeting and companying with them on terms of complete equality, both of them so giving testimony to the essential democracy of the England of today.

Ruskin college receives from its students only fifty-two pounds sterling for the college year of forty-four weeks, and gives them board, residence and education.

According to the deed of foundation the course of study covers social and economic subjects, with history, English composition, and courses of lectures on current social and political questions.

Many of the students have passed examinations and have graduated in the school of economics in the university. In the last three years, of the 52 men who entered examinations for the diploma 28 had been students of Ruskin college. Twenty-six passed successfully and 16 obtained distinction.

Dr. Slater is the principal. He is, as he should be, an enthusiast for the training of working men on the lines of Ruskin College. The professors are recognized authorities on their several subjects, and the education is thorough, from the ground up.

What becomes of your men? Dr. Slater was asked. "Many become teachers or lecturers at the various working men's educational institutions. Some have written books on economic or social subjects and made names and positions for themselves. Many, however, go back to their former work as mechanics and so on, carrying the inspiration of higher ideals into their old surroundings."

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Rapid Method of Coloring Drawings

A method of coloring drawings and white prints, using ordinary wax crayons and gasoline, has proved rapid and satisfactory. Crayon of the color desired is applied, and then rubbed with a piece of cloth, wet with gasoline, until the color is even and extended to the limits desired. If it overruns the lines, it can be erased with a pencil eraser. The crayon should be rubbed on lightly, but not necessarily uniformly. Yellows, purples, greens and light blues produce better results than other colors. The method is applicable to egg-shell and smooth drawing papers and to white prints on both paper and cloth.

Victoria Chapter

Victoria Chapter of the British Columbia Association of Architects at its last annual meeting elected the following officers: J. C. M. Keith, president; Major Ridgeway, vice-president; H. Emms Read, secretary-treasurer; Messrs. P. L. James, E. N. Butler, H. J. R. Cullin, R. Rose and K. B. Spurgin, executive council.

The chapter now numbers 62 full members, 25 associate, and 5 student members. Two of the members have been appointed to act with the building inspector in examining applicants for the position of assistant inspectors, and another member has been engaged in drawing up the program for the Provincial Jubilee hospital competition.

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City Planning a Science

City planning is a science. The landscape gardener is but one factor in such work; the engineer is another perfectly necessary factor; the sociologist is another. The business man, the man of affairs, is another. Indeed it requires the very best brains of the community to work disinterestedly and unitedly for a common purpose.

No one man can evolve a perfect scheme for the remodeling of a city. History proves this. Chicago, San Francisco and Portland have equally shown its fallacy, whereas Washington and Cleveland are splendid examples of the united efforts of able men.

The wise course for any city to adopt is to call in a man who is experienced, and whose judgment is mature to make a careful study and analysis of these rival plans, to get into touch with the various civic organizations, to select the best features in the respective designs, and out of them to evolve the most satisfactory and economical treatment; for I cannot too much emphasize the fact that no one man can possibly devise the most satisfactory and complete plan.—Thomas Hawkes, Portland.

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Examining Board for Architects Upheld

The Supreme Court of Illinois handed down a decision this week which decides that the State Examining Board for Architects has the right to act for the purposes for which it was created. Last October a committee of the Chicago Architects' Business Association laid before the State Examining Board for Architects a mass of papers tending to show a violation of the law in the proposed construction of a theater, plans of which had been prepared by David Saul Klatter. Mr. Klatter sought and obtained from the Superior Court of Cook County, without a hearing, an injunction, forbidding the State Examining Board for Architects from taking action in the matter, claiming that the law, which gave the examining board the right to revoke licenses, and particularly Section 10, was unconstitutional. By the decision of the Supreme Court of the State, rendered this week, this injunction has been dissolved. Now that the question of the authority and legality of the State Examining Board for Architects has been called into question, the board has, through its attorney, Henry R. Baldwin, made application in the court for a mandamus to compel the owners of buildings to construct the season in compliance with the law. The net effect of the decision is to secure the better enforcement of the building laws of the city and State.—American Contractor.

Extracts from the Proceedings of the Forty-sixth Annual Convention of the American Institute of Architects, Washington, D. C., December, 1912

In lieu of a report from the Committee to confer with the National Association of Master Steam and Hot Water Fitters, the following letter to the Committee was read by the Secretary before the Forty-sixth Annual Convention of the American Institute of Architects in Washington, D. C., December, 1912. This, and all other Reports will be found in full later in the Journal of the Institute.

NOTE:—See last page for the action taken by the Convention in regard to this "Report."

NATIONAL ASSOCIATION OF
MASTER STEAM AND HOT WATER FITTERS.

New York, May 29, 1912.

Messrs. D. E. Waid, B. S. King, W. D. Hewitt.
Committee of Conference, American Institute of Architects.

Gentlemen:

At the conference between your Committee and the Committee representing the National Association of Master Plumbers and the National Association of Master Steam and Hot Water Fitters, held on May 20, 1912, at 260 West Broadway, New York City, the undersigned, appointed to prepare and submit to you a statement or brief covering the subject discussed, such brief to be used by you in preparing your report to the American Institute.

The subjects considered were:

1. The evils resulting from the practice of including the Plumbing and Steamfitting in "General Contracts."

2. The injustice of requiring bidders to pay for Plans and Specifications.

3. The problem of placing responsibility for damages caused by defective materials where it justly belongs.

As to eliminating the Plumbing and Heating from General Contracts we submit the following:

1. The number of General Contractors is seldom less than five and sometimes fifteen. Each General Contractor gets estimates from not less than three Plumbers and Steamfitters—sometimes from a dozen or more. The actual cost of each Plumber or Steamfitter who estimates is not less than one-half of one per cent of the amount of estimate.

If figured direct for Owner the number of bidders would average five. On a $2000 contract, the cost to "the trade" would be $2000 x ½% or $10.00 x 5, or $50.00.

If figured under General Contractor the number of bidders would average thirty, making the cost to "the trade": $2000 x ½% or $10.00 x 30, or $300.

The average profit on a $2000 contract would not exceed $250. When figured for Owner "the trade" makes $200 net, or 10% on the contract.

When figured for General Contractor "the trade" actually loses $50.00.

Of course, the man who gets the contract makes $240, but it is at the expense of his fellow craftsmen, and "the trade" as a whole is poorer than if the work had not been done.

This is not an exaggerated statement. It describes a process that is in continuous operation, and if all the work done by the Plumber and Steamfitter were on the sub-contract basis, there would be no survivals after a few years.

2. Estimates given to General Contractors are not, as a rule, fairly handled. No provision is, or can be, made for their being opened in the presence of bidders and the contract awarded in accordance with fair competitive rules. Usually they are opened as received by the General Contractor or one of his employees, and the figures may be easily obtained by favored competitors. If the General Contractor gets the work, it is seldom that he awards the sub-contract on the merits of the sub-estimates he has received.

Either the favored party is offered the contract at the price of the lowest bidder, or else new bids are obtained, often from new bidders, and not infrequently the lowest final bidder is induced to take the contract at even a lower price by false representations as to the lowest prices of his competitors.

3. There are very few General Contractors in whose offices sub-bids are fairly handled.

The nature of our work is such as to justify and often necessitate our direct contract with the Owner or his immediate representative, the Architect. The General Contractor is not concerned in such changes and betterments as are often made clear to the practical artisan as the work proceeds, and frequently an inferior installation is made because the General Contractor cares only to comply with the specifications.

4. Many General Contractors are unable to properly finance the work they undertake, and depend largely upon their credit to carry it through. In this "credit" they include the sub-contracting Plumber and Steamfitter.

There is scarcely a member of our craft who has not experienced great loss through this condition of the General Contractor's finances. Almost invariably in such work our payments are delayed long after the General Contractor has received them.

It is manifestly unfair that a third party should stand between us and the Owner, with power to embarrass our business by withholding payments.

5. It is reasonable to conclude that the same work done through a General Contractor will cost the Owner more than if done directly for the Owner. In some way the General Contractor will get a profit. If it is made to seem that the building costs less by General Contract, the Owner may be sure that he is getting less in quantity or quality. No Plumber or Steamfitter will do the same work cheaper for a General Contractor (with all the risks and disadvantages) than he would do it for the Owner.

While the evils of sub-contracting are generally recognized among the Master Plumbers and Master Steamfitters, and resolutions have been adopted by both our National Associations reprobating the practice, we have no power to compel our members to cut out such business.

Very many, however, refuse absolutely to figure for General Contractors, and among those who thus refuse are many of the most reliable concerns in both branches of the business.

This class is steadily growing, especially among those who do high grade work. The General Contractor is

already dependent upon such concerns in the Plumbing and Steamfitting business as are considered below the average as to business standing and mechanical ability.

It is hoped that the American Institute of Architects, recognizing the practice as a growing evil, tending to degrade the business of the Master Plumber and Master Steamfitter and to foster the kind of work which appears better than it is, will take such action as will commit the profession to an earnest effort to eliminate it.

Such a deliverance by your Society will greatly aid us in securing practical unanimity among our members in their efforts to abolish a practice which we believe to be a serious menace to our business.

Referring to the second subject of our discussion, "the injustice of requiring bidders to pay for plans and specifications," your Committee seemed not to know that this is of frequent occurrence.

We do not object, when taking plans for figuring to making a reasonable deposit, to be returned when plans are returned, nor to paying for additional plans when we need them for additional use after the contract is awarded. Our objection is to the making of a charge for them when used only for estimating, before the awarding of the contract. The necessary expense of figuring any job of steamfitting or plumbing is seldom less than ½% of the estimate. Competitive bids are obtained for the benefit of the Owner, and it would seem as if a charge for plans should not be added to the other necessary cost of the bidders. We infer from the statements of your Committee that there is no rule of your society justifying such charges, but since the practice already obtains in some places, and is liable to spread, we would suggest that a resolution of the American Institute covering the matter would prevent the growth of what we believe to be an unfair practice.

The third subject of our discussion, "placing responsibility for damage caused by defective materials," was recognized as a difficult one.

The Owner should not suffer loss because of imperfect materials; nor should the Architect who specifies goods of standard make; it is right that the contractor, who is supposed to be expert and to carefully examine all materials he uses, should be responsible when it is possible to discover the defects; but there are many cases in which it is impossible to discover the defect until the damage is done. This is especially true in regard to cast iron and enameled ware, in which defects, not discoverable under the usual tests, develop within a year from the time of the installation. These goods are generally specified by the Architect, and the Contractor must purchase them as specified. He must guarantee them for one according to the terms of nearly all contracts. No manufacturer of these goods will guarantee them to the contractor except to the extent of furnishing a new fixture, or part of the same, which may be found defective, excluding all cost of damage done and of replacing the defective fixtures, which cost is often from twenty to one hundred times the cost of the bare fixture.

In all such cases the loss should fairly fall upon the manufacturer. But we are unable to get from him a guarantee, except as above stated, and for lack of this we often sustain losses far in excess of all profits.

We believe that the Architects can help to right this great wrong.

If you will put into the contract a clause providing that the Contractor shall deliver to the Architect or Owner a written guarantee from the Manufacturer to make good all damages caused by the defects in the materials of his make used on the job and developing within one year from the date of installation, we can then demand such guarantee from him.

It is quite possible that many manufacturers will fight such a demand, but some will concede it, and others will quickly follow. It can be obtained if the Architects will help us, and once secured, it will place the responsibility where it belongs and be of great benefit to Owners and Contractors.

By direction of the Conference Committee of National Association of Master Plumbers and National Association of Master Steam and Hot Water Fitters, we desire to thank the American Institute of Architects for the privilege of conferring with you on these important matters, and to express the hope that our conference will result in such action as will be of mutual benefit.

Respectfully yours,

(Signed) JOHN TRAINOR,
EDWARD B. DENNY,
Sub-Committee.

NOTE:—Committee appointed by the President to consider the reports of Special Committees, submitted the following recommendations to the Convention, which were adopted with the report of the Committee.

(1) **To Confer with the National Association of Master Plumbers.** Three points are raised:

1st. The letting of contracts in the trades involved apart from the General Contract.

This is a broad question, involving equally all trades and also important general considerations in the carrying on of building operations. The practice of a divided contract is not a new one; on the other hand, the practical necessity, under certain conditions, of a general contract, can not be eliminated. To cure all of the ills complained of, and many others, is the recognition by the Architect of his responsibility towards the sub-contracts, as well as toward the general contractor and owner. The viciousness of the situation which allows the General Contractor to have a bargain sale of sub-contracts as soon as the general contract is awarded to him, regardless of what sub-bids form the basis of his estimate, can not be too strongly characterized. In the first place, it is unfair to the bona fide sub-bidders, and in the last analysis it is detrimental to the owner's interest; for if a sub-contractor cuts his price for the work, it is inevitable that he will cut the work to fit the price just as far as he is able, and, however strict the inspection, its power has a practical limit.

We believe, therefore, that in this connection lies the problem of very great importance, worthy of the careful study of an institute committee, to wit: the architect's duty toward sub-contractors when work is let under a general contract.

In order to bring this matter before the Convention for an expression of an opinion, we offer the following:

Voted, that it is the sense of the members of the Institute here assembled, that when work is let under a general contract, it is the duty of the architect to endeavor so to carry it on that all portions of the work be let under legitimate processes of competitive estimating to the exclusion of those practices of bickering and trading of sub-bids, which are detrimental alike to the interests of the sub-contractor and the owner.

2d. That contractors should not be called upon to pay for the blue-prints used in estimating. We believe that whenever possible, miscellaneous items such as these should be borne directly by the undertaking involved and not be transferred to the list of overhead charges of contracts, to be eventually paid by other bidding operations. Let the owner pay for what he gets and not for what others have got and not paid for.

3d. Responsibility for damage due to use of defective material.

We believe that the contractor can estimate the chances of loss on this as accurately as the material man, and can protect himself by reasonable addition to his estimates to cover labor backed by the guarantees of the material men to replace material.

We recommend that this special committee be continued and that these matters be referred back to it for further consideration and report.

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Graduates With Honors

In June, George Howell Jones, son of T. E. Jones, former architect for the Portland School Board, graduated with honors from the Boston Institute of Technology. He will enter upon the practice of his profession in the East—probably New York City.

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A New Building Stone

Wooden shanties are probably bound to go in the Christmas Lake and Silver Lake Valleys, Oregon. Stone, supplied by either of a half dozen quarries on Table Mountain, are likely to supplant them. F. R. Bass is their rediscoverer. The stone is a queer material, appearing to be a mixture of clay and sand, as though the stone were in process of formation. It has the peculiarity of being readily cut with saws or chisels when first taken out, and can be shaped into blocks of any form desired with but little labor. After exposure the substance hardens and becomes very durable. The quarries are within the Fremont National Forest. Early settlers used the stone to some extent, for fireplaces, chimneys, foundations, etc. Many of these have stood the weather for more than twenty-five years, and are as firm or firmer than ever. Perhaps this stone may become adaptable to wide commercial use in time.

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Offers $500 in Prizes

Dorr E. Keasey, the Portland real estate man, interested particularly in Portland Heights' property, has hung up $500 in prizes that may interest budding architects. He is desirous of obtaining plans for a number of artistic model houses, appropriate for hillside locations. He has detailed the preparation of the program to the Portland Architectural Club. This organization will contribute several plans itself free, and receive $250 for writing the program. The remaining $250 will be apportioned thus: First prize, $125; second, $75; third, $50. Mr. Keasey will hang upon his office walls all plans presented. Out of the several types of dwellings suitable for precipitous sites thus produced, the buyer of a location for a home on Portland Heights is likely to find one that will appeal to his particular fancy. The idea is to get house plans that appear to have been specially designed for a given location, and not those merely designed by chance. Already there are too many dwellings erected that are architectural eye-sores, in that they are entirely incongruous in present surroundings although they might be entirely congruous if placed in other locations.

The Portland atelier members feel much interest in Mr. Keasey's idea. All plans were originally to have been in by July 15th, but the time has been extended into September. Already it is known that twenty-five designs will be forthcoming. The competition will be under the rules prescribed by the American Institute of Architects.

Tacoma's New High School

The enterprising city of Tacoma, Washington, shows prosperity to the extent that the School board has recently commissioned Messrs. Heath & Gove, the well known firm of architects, with headquarters in the National Realty Building, Tacoma, Washington, to prepare plans for an extensive structure known as the Lincoln Park High School. This building, now in course of construction, will cost in the neighborhood of $400,000 and occupies a commanding view on the south side of the city. The building and grounds cover a large block and constitute an extensive basement, first and second floor plans, which details are shown in the illustrated section of this issue. A notable feature of this building is that Messrs. Heath & Gove, architects, are setting an example on the Pacific Coast in the method of laying tin roofing over wood strips or battens, creating an artistic heavy rib design. This institution is to be thoroughly equipped in all departments necessary for instruction in various trades, as the present day demands.

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Victoria Competition

Architects in the city are busy now with their competitive plans for the Provincial Royal Jubilee Hospital, which have to be in by August 1.

As the plans of the directors contemplate a large group of buildings, the competition is receiving the attention of the profession both in Vancouver and Victoria and there is a prospect of a considerable diversity of design in the plans which will be lodged.

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Architects' Fees

The recent decision of a British Columbia magistrate, in effect that an architect cannot claim a mechanic's lien in connection with the preparation of plans for building purposes comes as a complete surprise to architects throughout British Columbia.

Vancouver architects, especially, are considerably chagrined at the outcome. The case on which the issue was decided involved a building which had already been erected. This leaves the situation all the more embarrassing.

Heretofore it has been generally taken for granted that an architect could claim fees under the mechanic's lien act, in common with others identified with the building trades. The magistrate held that quoted decisions tending to support this belief had not involved the claims of an architect for fees, directly based on the action of a lien.

The architectural profession has always felt that the preparation of plans actually used in subsequent construction work has been of equal importance to the furnishing of materials or labor, and that the same measure of legal protection in enforcing payment of fees should be extended.

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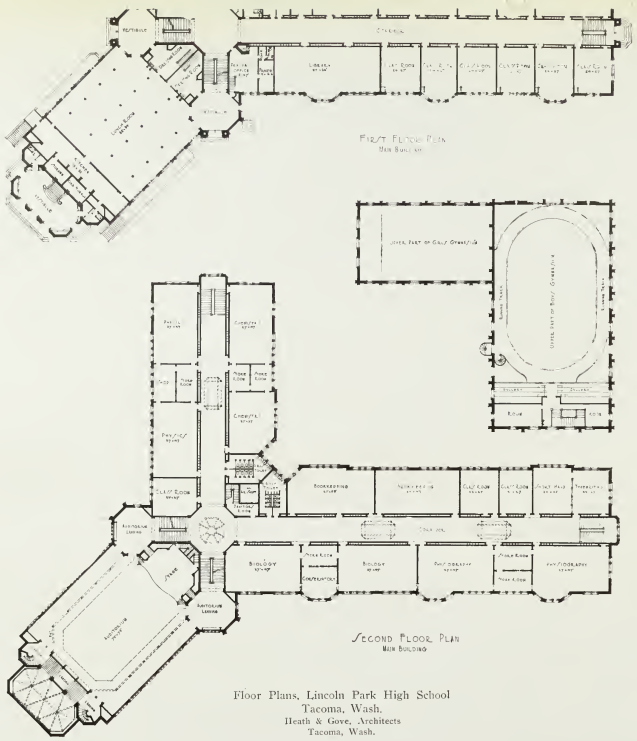
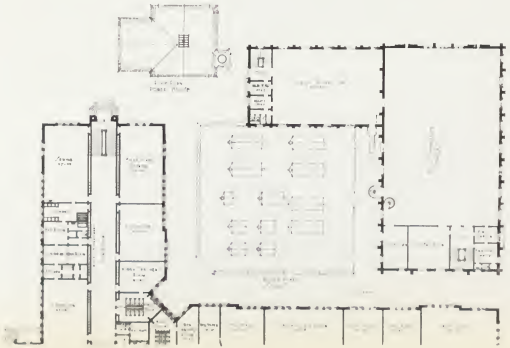
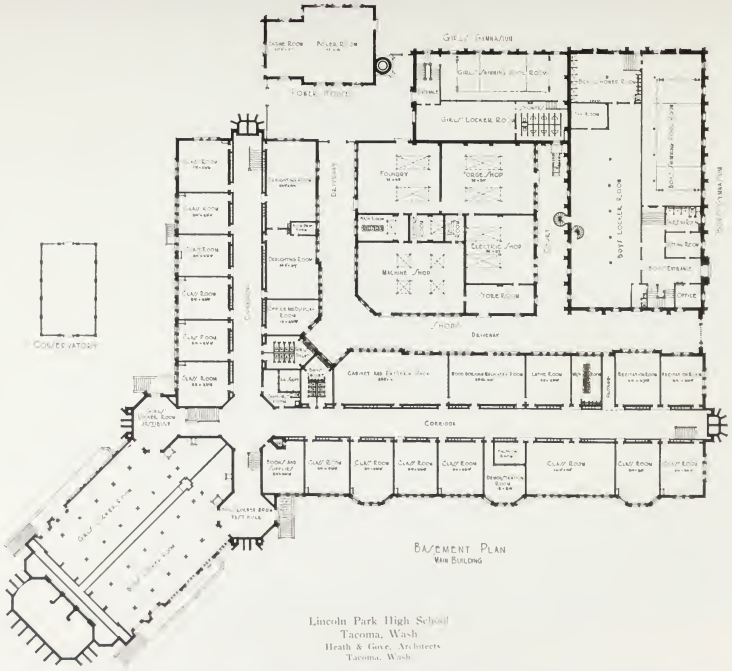
A concrete bowstring roof truss is a feature of the recently constructed Belleville Theater in Paris, France. The truss has a clear span of 69 feet and an overall height of about 15 feet. The top chord approximates a parabola and is connected with the bottom member by six vertical suspenders, spaced about 10 inches on centers. There are no diagonal members to the truss, all provisions for live load being taken up in the transverse connections between trusses.



Floor Plans, Lincoln Park High School
Tacoma, Wash.
Heath & Gove, Architects
Tacoma, Wash.

Perspective, Lincoln Park High School
Tacoma, Wash.
Heath & Gove, Architects
Tacoma, Wash





BASEMENT PLAN
MAIN BUILDING

Lincoln Park High School
Tacoma, Wash
Heath & Gove, Architects
Tacoma, Wash

Garden Front, Residence H. D. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

Reception Hall, Residence H. H. Hart
Oakland, Calif
C. W. Dickey, Architect
Oakland, Calif

Reception Hall, Residence H. H. Hart
Oakland, Calif
C. W. Dickey, Architect
Oakland, Calif

Breakfast Room, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

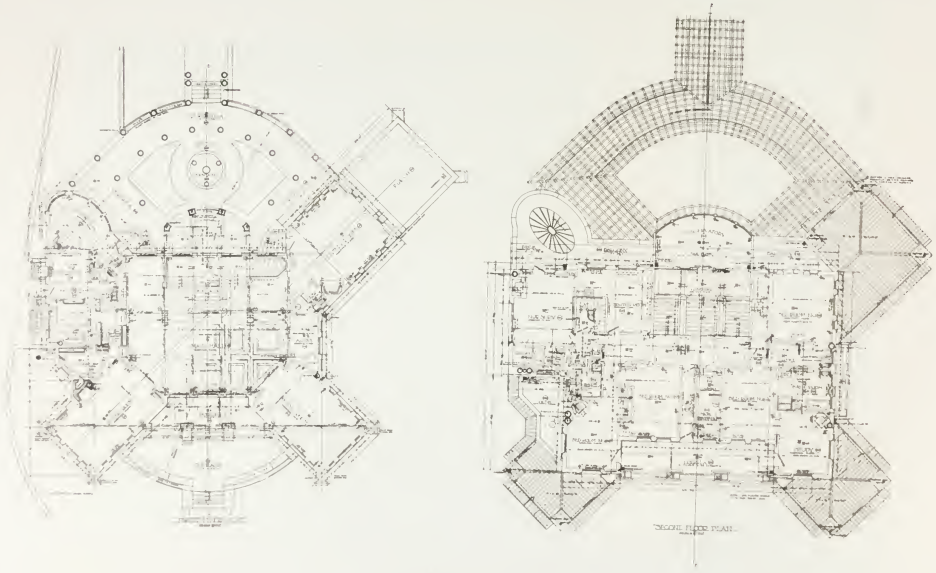
Dining Room, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

Music Room, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

Wall Fountain in Garden, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

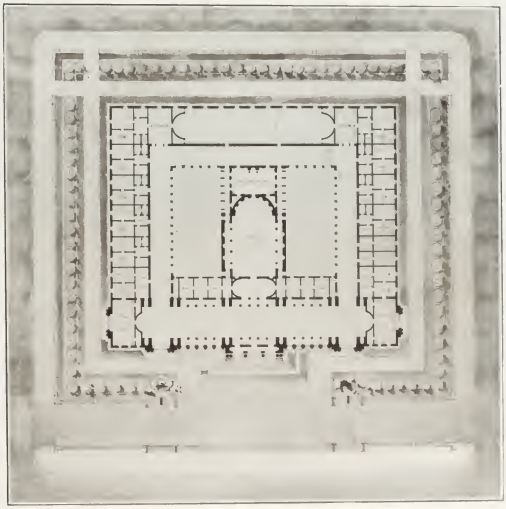
Garden Front, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

Patio, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.



Floor Plans, Residence H. H. Hart
Oakland, Calif.
C. W. Dickey, Architect
Oakland, Calif.

PACIFIC COAST ARCHITECT
August 1911



Building for the Supreme Court of the United States
Ernest E. Weihe, Placed Fourth, Scholarship Competition
First Medium, S. B. A. A.
Atelier Byrne Rogers

CARNEGIE LIBRARY, AT HOWARD UNIVERSITY, WASHINGTON, D. C.
Whitfield & King, Architects, New York City.

A good illustration showing ribbed tin roofing on the building roofed with 7,500 square feet IX "Target & Arrow" roofing tin, manufactured by the N. & G. Taylor Co., Philadelphia.

Showing Details for Ribbed Tin Roofing

By Netcif Rellum.

Fig. 1 shows the plan of the rib and also a vertical section on XX. All the rest of the figures showing end views are sections on similar lines to XX. The vertical section in Fig. 1 shows that the sides of the ribs are fastened to the rib by driving nails through them at the upper end, so that the seam formed by the side and cap will cover the nail heads. The section at "A" shows the cap attached and seams closed and at "B" the seam malleted down and finished.

Fig. 2 shows a similar seam fastened with cleats in which "A" is the finished seam and "B" the seam in process of construction. Here the cleats are fastened to the side of the rib.

Fig. 3 is similar to Fig. 2, excepting the cleats are fastened to the top of the rib. This I regard as the inferior method when comparing Figs. 2 and 3. When the wind causes much suction the tin roof raises and lowers, and in Fig. 3 the point X becomes a hinge in the cleat, and in time this raising and lowering, possibly slight, depending on the nearness of the nails to the edge of the rib, will by the law of fatigue of metals cause the tin cleat to break, with the result of then having a loose and unfastened tin roof.

Fig. 4 shows a method of applying a tin roof in which there are no seams on the ribs, but the top and sides of the rib covers are locked to the tin between the ribs in the same manner as in ordinary tin roofing. The drawing shows in detail the procedure, excepting no cleats are shown, or when flat seam is cleated instead of nailed through the sheet. The covering of the rib is temporarily held in place by large nails as shown, which are withdrawn when it has been tacked with solder. In Figs. 1, 2 and 3 the rib must be the size of tin cover, so that the corner can be seamed, or if not seamed so that the edge will not pull out of the cap if left as at "D" of Fig. 3. In Fig. 4 the rib shows a beveled rib "N", which does not affect the laying of the roof on the rib covering. Here can be used ribs of various widths and uneven edges.

In Fig. 6 is shown a roof in which ribs and the ordinary standing seam between the ribs are used. It is shown in larger size in Fig. 6 and the standing seam is made finished either 3/4" or 1" high depending on the size and height of the rib, and, if merely proportioned, the rib spaces between height of standing seam and

present a good appearance. This style is usually formed in eight-foot lengths in the cornice break, including the first edge on the high side of the seam, and is put together in the same way as the rib cover of Fig. 4.

Fig. 5 shows a rib of indefinite length, or what may be necessary for the work at hand. This rib is fastened to the roof or floor or any smooth flat surface, and the formed covers of Fig. 4 or the formed strips of "tin roofing" of Figs. 5 and 6 are then put together in the required

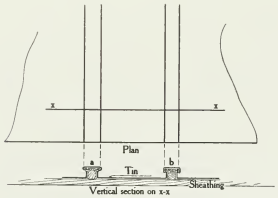


FIG 1.

lengths, using the mentioned rib as a guide. When there are many pieces put together the wood rib at the point where the seams are malleted down (and then soldered

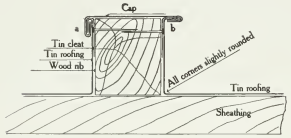


FIG. 2.

before removing) loses its true form. So some way must be devised that will stand this frequent malleting. In Fig. 5 the plan and elevation of the construction rib show one method of reinforcing the rib at the point where the seams would come. The vertical sections Z-Z and Y-Y show the cross section on the plan. The rib is usually screwed down, making it easier to remove without damage to it than when it is nailed. I do not know of any special tool to turn the edges on the sheets, or rather long strips (many sheets), for roofing as shown in Figs. 1, 2 and 3.

Some years ago a manufacturer of steel roofing placed on the market (an Ohio manufacturer—Canton, Ohio, I think) a steel roofing having standing seams made as shown finished at "C" of Fig. 7. The edges on both sides of the sheet were the same height, and a pair of tongs with jaws, as I remember them, similar to "D" of Fig. 7 was used to turn the edges (both at once) as at "A." These edges were then turned down with a mallet and a cap hooked to them as at "B." Then, using the tongs again, the seam was squeezed and finished as

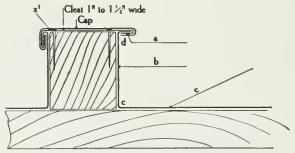


FIG. 3.

at "C." The tongs worked in a manner similar to Burritt Double Seamers, although there was only one tong used and necessary. The exact details I do not remember, which at present is immaterial, excepting that in a roof having ribs we used the same tongs to turn edges for a roof which was, I think, similar to Fig. 2 (edges for Figs. 1 and 3 would be the same). But the jaws were not wide enough, so a piece of sheet metal was soldered to one jaw as at "E," of sufficient height to turn the required edge as at "F," the bend "G," having previously been made with a gutter tong having a gauge. The drawing shows the tong bending the edge "F" when it was used as a steel roofing tong.

At other times the edge "F" was bent by hand as in Fig. 8, where this edge is lettered "A." The letters in Figs. 8 and 9 refer to similar letters in Fig. 3. The bend E' was turned with the gutter or improvised roofing tongs, and the edge A' was turned with a block and mallet as shown in Fig. 8 at A". This edge or corner of the block was faced with sheet iron to keep a sharp corner. A section of the handle is shown at Fig. 10. Any convenient handle would, however, answer the purpose. One end of the cap before it is edged is shown in Fig.

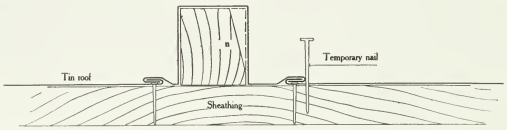


FIG. 4.

11. Both the side and end locks are formed in the folder and then the pieces are locked and soldered together to form strips. They are folded as shown in Fig. 12—E" being the edge as folded in the folder and E where it is closed. At E' is shown the opposite edge that is formed slightly more than a right angle, so that it can be slipped over the edges of the sides of the rib covers.

In Fig. 13 is shown a half plan and a part elevation of a dome having ribs. The rib cover is formed in the cornice break in the same way as if it was a straight, and then, if desired, pieces are put together in lengths as required; but short pieces can be handled to better advantage, as they are pretty wobbly when crimped.

Fig. 16 shows the edge of the cramped side. Fig. 17 shows the plan of the rib when it tapers toward the top, being narrower at the top than at the bottom, and it is crimped in the same manner as described and applied in the same way as a rib of even width now to be explained.

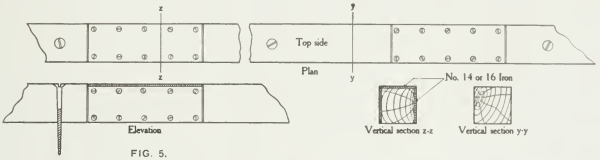
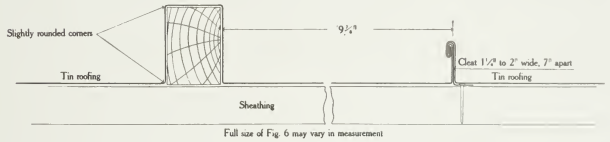


FIG. 5.

FIG 6.



Full size of Fig. 6 may vary in measurement

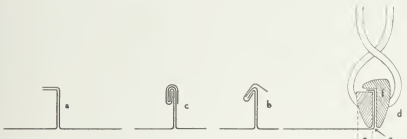


FIG. 7.

FIG. 9.

FIG. 10.

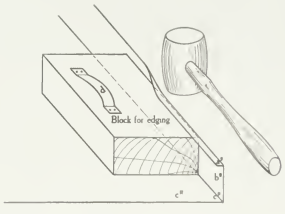


FIG. 8.

The sides are then crimped, just one side a little and then the other, until the rib has somewhat the form of a smaller arc than is necessary, as the rib can be stretched easily, but contracted with difficulty. An edge or lap is then turned out as at X of Fig. 15 with the mallet. In this operation care and some experience are necessary, or the edge will be stretched too much and contain many buckles when the tin is ready to be soldered into place over the rib. Here also at times temporary nails are driven until the cover is firmly tacked with solder.

Fig. 14 shows the full size of the crimping on the rib, but is drawn to such a small radius as to be out of proportion, the smaller domes seldom being of less than a radius of five feet where ribs are used.

Fig. 15 shows the rib made of lath, so that it can be bent to conform to the curvature of the dome. At times the ribs are sawn out of solid material, and again, instead of lath, thin strips wide enough to fill the cover are used. At "H" is shown where the tin between the ribs is nailed to the roof boards, and at "N" where the lap of the cover is soldered to the tin. In this method the expansion and contraction will not affect the seam. When the lath or ribs fill the cover the tin is nailed through the edge "Y" in which case "X" is close to the crimped side but not soldered to the lap "X" and is therefore provided for contraction and expansion. At "C" is shown a method of nailing the cover to the roof boards and filling in between the ribs and soldering as shown. If the roofing is

not soldered to the nail in the lap there will also be enough expansion and contraction material. The writer has put covers on ribs omitting the lap "X," simply butting the crimped side against the tin roofing and soldering.

Another instance was where a dome was covered with flat locked tin and they later decided to have ribs. The ribs were formed of lath and the side butted against the tin and soldered.

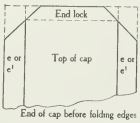


FIG. 11.

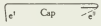


FIG. 12.

FIG. 17.

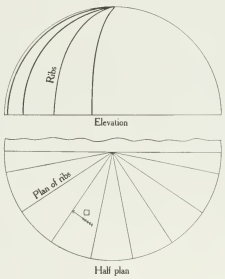


FIG. 13.

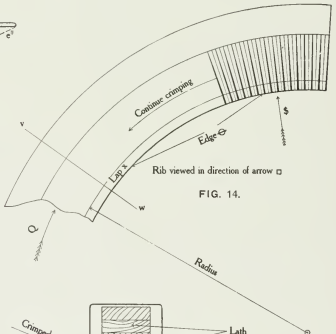


FIG. 14.

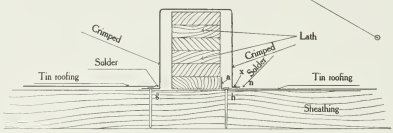


FIG. 15.

FIG. 16.

Free Books

O. P. Hoff, State Labor Commissioner, Salem, Ore., has ready for distribution a booklet, "Outline of Labor Laws of Oregon for the Protection of Labor, 1913," that will be mailed free to anyone sending a postal card requesting the same, giving number of copies wanted, name and address.

Greatest User of Asbestos

If the United States cannot boast of preeminence in asbestos production, as it can for many other minerals, it is at least a matter of some gratification to know that the bulk of the world's production comes from America and that the Canadian deposits yield by far the larger part of the total. In this, too, the United States benefits, for the nearness and reliability of the Canadian supply, largely owned in the United States, affords the basis of our eventual unquestioned supremacy in the development of asbestos manufactures. Even as it is, there are, according to J. S. Diller of the United States Geological Survey, some valuable deposits and promising prospects in the United States, and these would undoubtedly be much more largely developed were it not for the extent of the Canadian deposits. The domestic production in 1912, according to Mr. Diller, was 4,403 short tons, valued at $87,959, and although this was a decline of 42 per cent in tonnage compared with the output for 1911 it was only 27 per cent less in value, owing to the larger quantity of higher grade asbestos in 1912. Georgia, Vermont and Wyoming are the three States which mine asbestos. The Canadian exports of asbestos in 1912 amounted to 88,008 tons, of which 71,426 tons, or more than 81 per cent, was imported into the United States. This quantity was 67 per cent of the entire Canadian production.

Asbestos is the most important fire-proofing material known. Its fibrous structure adapts it to a wide range of applications—from woven fabrics, such as theatre curtains and articles of clothing, to asbestos shingles, stucco, plaster, asbestos "wood," and various other forms of building material that render structures thoroughly fireproof. Its lightness, strength, durability and insulating properties against heat and electricity give it special advantages for use in constructing cars and electric motor subways.

The most common uses of asbestos are for asbestos paper, millboard, pipe covering and lagging to inclose heat pipes, furnaces and locomotives in order to prevent loss of heat in transmission. As a non-conductor of heat it may be used not only in the preparation of fireproof safes and vaults, but also for cold storage and cooling structures. Houses made of asbestos materials or coated with asbestos throughout are not only warmer in winter, but cooler in summer.

Canadian Government Architect to Visit British Columbia

Chief Architect Ewart, of the public works department, Ottawa, has left for a trip of official inspection which will take him across Canada. Mr. Ewart will go to Vancouver and return. He will stop at all places where important public works are in progress and look them over.

The chief architect will be away probably for a month or more, and will spend some time for the benefit of his health, as well as attending to his duties.

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New State Architect

George B. McDougall, junior member of the well-known San Francisco firm of architects, has been appointed to the position of state architect, to succeed John W. Wollett, who has resigned. Mr. McDougall has contributed to the architecture of San Francisco many buildings, among which is the Young Men's Christian Association building. This, together with the firm's work for the University of California and the vast amount of commercial work credited to them, has given the new State Architect a wide experience which well fits him for the position of responsibility to which he has been appointed.

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A Draftsman's Details

O what a life
The draftsman leads
In this old world today;
He draws his plans,
He draws his breath,
He also draws his pay.
His weary hours
Are long drawn out,
While waiting for a "raise";
His wrinkled brow
Is drawn down more,
No increase meets his gaze.
He fills his pen,
Then draws a line,
And mutters, "Things ain't square!
I think I'll chuck
This bloomin' job
For one with more fresh air.
I glue my nose
Down to my board
The bloomin' live-long day;
The bloomin' boss
Is standing near
To see I earn my pay!
The boss, he thinks
I ought to know
All things from A to Z,
And still be glad
To work for him
At what he now pays me.
This drafting life
Is 'on the Fritz.'
It surely makes me sore!"
He "beats it" home
But in the morn
He comes right back for more.

—A. T. N. in Engineering News

Effective Brick Work

Considered from the point of view of beauty brick would seem to occupy a unique position among the structural materials available for the creation of beautiful buildings. Further analysis discloses among others the following interesting points:

Brick is made in reasonable small units, so that in the case of many modern buildings, at least 100,000 of them show on the exterior. This, together with the varying shapes and sizes obtainable, make possible an almost infinite variety of form and pattern, thus giving full scope to the imagination, ingenuity and skill both of the designer and the workman.

Brick, moreover, is now made in almost every conceivable color and shade, the permanency of which is unequaled by hardly any other building material, while such a "palette," therefore, at once is command, and by a skilful use of color, the brick builder of today can readily add to his design that living touch which the painter gives us in his painting.

Brick may also be counted unique in the fact that it requires for its structural efficiency the use of a very considerable amount of material of quite another kind and color, namely, mortar; and, further, that this material must of necessity show in the form of a joint to a more or less degree in the face of the finished wall. A mistaken idea has prevailed that the mortar joint is a blemish that should be suppressed as far as possible, or be colored to match the brick. We find, however, that the designer of today seizes the very opportunity afforded by a mortar joint to introduce into his wall another element of color and pattern.

The word "texture" has lately come into use in connection with brickwork, and, strange to say, this word has a very plausible application, for the builder in interesting brick work has much in common with the weaver at the loom as far as resulting color effect goes. Just as the weaver, with his threads of varying sizes and colors, produces a never-ending variety of useful and beautiful fabrics, just so it is possible for the brick builder, with his bricks and joints of many colors and sizes, to weave new ideas and combinations in his work, all in beautiful and imperishable patterns; and this applies to all brick.

Just as the fabric charms and delights the eye, and at the same time protects men from heat and cold, and performs a thousand other useful functions, so the beautiful way of brick, exemplifying man's ingenuity and his artistic skill, forms also the protective structure of the buildings erected for his use. Brick, therefore, would seem to fulfill to a very high degree the requirements of an ideal architectural material.

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High Cost of Building

Nothing is more uncertain than the future, yet it is a human weakness to expect unfavorable existing conditions to change for the better. Nowhere can this be applied more appropriately than in the present condition of the high cost of building. Owners, architects, contractors and all others interested in building are forever looking toward the future for better building conditions, but these conditions seem as elusive as the pot of gold at the rainbow's end.

Every season brings new disappointments; instead of a drop in the cost of material and labor—the main basis in building—they are continually rising. Owners who have been awaiting the time when they can build cheaper have not a long wait before them, if we judge the times aright. The building public is in the clutches

of both corporations who have the control over material, and unions who control labor. As long as there will be an increased demand for material the cost will also increase. Within the last fifteen years some materials have tripled in cost! Labor, on the other hand, is a great source of worry. Contractors admit their fears in giving estimates, as they are continually facing probable loss. True, some trades are being underpaid in proportion to others, yet many a workman is receiving a salary far above his worth. No one, of coarse, begrudges the wages, no matter how much, of the honest, skillful and industrious workman.

However, enumerating these causes does not remedy matters. There are as yet no signs of checking these corporations, nor of correcting the abuses in unions. It, therefore, behooves the building public to cope with the present conditions, forgetting the past and the future and aim to overcome all obstacles in building by calling forth greater skill on the part of the architect and builder and a little self-denial on the part of the owner. Hence, it is not advisable to wait for the uncertain future. Build now. Build within the limit even if it does mean curbing some pet scheme. And last, but not least, employ only the most skillful men of the various trades (who are the cheapest) and much will be done to help forget that material and labor are the principal causes of the present high cost of building.

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National Tube Company, Pittsburg, Pa., desire to announce that commencing August 1, 1913, they will enter the electric conduit field. Having contracted with the National Metal Molding Company and the Safety-Armorite Conduit Company, both of Pittsburg, Pa., to manufacture and sell this product for us as our agents, under their various brands. We have decided to sell this product on the "Pittsburg Basing Discount" plan in the same manner as all wrought pipe for other purposes has been sold for the past thirteen years.

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Newspapers for Walls

The Chinese are the greatest consumers of old newspapers in the world. The official returns to the custom house at Newchwang state that that port alone in 1911 received 1918 tons of old European newspapers valued at £14,500.

It is not at first easy to discover to what use so much obsolete news can be put. However, we gather that the middle class Chinese prefer newspaper to the native variety as a covering for their walls. It has a greater power of resistance and affords a more effective barrier to the invasion of the vermin that plague Chinese houses.

Moreover, the natives are experts at cutting out of the newspapers waistcoats which they wear next to the skin. These paper waistcoats are said to be the best possible protection against a sudden cold snap. In view of these admirable uses to which European newspapers may be put it is not surprising to learn that the imports of 1911 show a considerable increase in weight.

The value of the import has, however, declined. It is interesting to note the reason for this decline. It is explained by the rapid development of the native newspaper press which has taken place during the last few years. Chinese newspapers are now printed for the most part on paper imported from the United States, so that instead of paying high prices for imported newspapers the Chinese of the interior use the "returns" of the native press for their walls and their waistcoats.—National (Shanghai) Review.

A New Line of Varnishes

W. P. Fuller & Co. intend to place upon the market in the near future a complete line of house and cabinet varnishes of their own manufacture. Based, as they are, on exhaustive tests covering a period of years, these varnishes represent the highest standard of excellence.

A new building has just been erected for the sole purpose of caring for this new line.

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Signs of the Times

There was a time—and we have by no means outgrown its effects even yet—when reformatory institutions for wayward youth were expressed only in massive buildings. They were cold, grim, forbidding. A new order is evolving. Instead of vast piles, they are being broken up into units instead of one large structure, gloomy and disquieting, numbers of smaller buildings are becoming the order of the day. These remove occupants from the institutional idea, and give, in its stead, a very fair imitation of a real home.

In Portland an adaptation of this idea is being made in the Fire Department. Instead of a stiff, staid, comfortless place in which the firemen are housed, in one instance, at least, there has been made a refreshing change. A homelike appearing bungalow has been substituted. It serves its purpose well, and should be more generally adopted, especially in the outlying districts where it is perfectly practicable.

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Keying an Ad

Keying an "ad" and paying a clerk to keep tab on "inquiries" is good business in a ten-cent mail-order proposition, but doesn't work out on anything bigger. We know a wall-board man who got 480 inquiries from a farm journal "ad," sent out a stack of catalogues and booklets, chased follow-up letters out in one-two-three order and has yet to sell a single foot of the board to any of the idle curious who answered his advertising. The same manufacturer got but two inquiries out of an "ad" in a building magazine, but sold both parties.—The Builders' Guide, Philadelphia.

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Issues Portfolio for Architects

The Dahlstrom Metallic Door Company, Jamestown, N. Y., have just started to distribute to the architectural profession and others interested a portfolio of architectural details of hollow metal door and trim construction.

The value of steel interior finish for high-class buildings is being more and more appreciated by architects, builders, owners and managers. Extended information regarding the best practice in hollow metal door and trim construction and its adaptability to varying designs, conditions and requirements is therefore timely and will serve a useful purpose.

The original drawings for these plates were made by men in their own organization, under the supervision of their Mr. Harry Wilson, and additional plates will be issued from time to time to show new developments in the art.

The portfolio will be sold to parties other than practising architects at $5 each.

Industrial Publications

A halftone of the George H. Long residence at Steilacoom Lake, Wash., forms the cover illustration for the August issue of "Roofing Tin," published by the N. & G. Taylor Co., Philadelphia. This residence is roofed with I. C. 28x20 "Target & Arrow" roofing tin, manufactured by the N. & G. Taylor Co., Philadelphia. The sheet metal work is done by the Ed Miller Cornice and Roofing Company, Tacoma, Wash.

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Spokane Firm Gets Big Contract

Competing with big firms from different Western cities, the Spokane Ornamental Iron and Wire Works Company has secured the contract for the ornamental iron and bronze in the new skyscraper being built by the Pacific States Telephone Company in Portland, Ore. In getting this contract, approximating $40,000, for iron and bronze, they bid against big firms in San Francisco, Chicago, Minneapolis and Seattle. Another contract that came to them, and of which they are proud, is the new Vancouver Club, in Vancouver, B. C. This work is being installed. Still another contract, showing the scope of territory they are covering, is for the new First National Bank Building in Great Falls, Mont. This firm is going after business throughout the entire Northwest, and is getting it.

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Trade Notes

Architect W. R. B. Wilcox of Seattle was a recent visitor in San Francisco.

Victor S. Person, with L. A. Norris & Co., has returned from spending a two weeks' vacation at Lake Tahoe.

Mr. Hoas, with L. A. Norris & Co., has returned from an extensive trip to the Twin Cities.

N. W. Thurston, of Lilley & Thurston, has returned from an extended motor trip to Southern California.

Architects Horel & Roberts, Vancouver, B. C., have moved from the Dominion Building to suite 901-902 Welton Building.

Architect T. R. Kimball of Omaha has returned home after spending several days in San Francisco.

Architect B. Lubschez of Seattle has returned home after spending several days in San Francisco on business.

Architect George W. Kelharm, with offices in the Sharon Building, has returned from his vacation spent at Lake Tahoe.

Architect Harry W. Hewitt, Los Angeles, is now associated with A. P. Dennis, with offices at 618-620 Fay Building.

Architect S. Tilden Norton of Los Angeles is on an extended vacation, which he will spend in Alaska, going as far north as Skagway.

The Simplex Window Company have moved from the Crocker Building to the Underwood Building, 525 Market street.

Architect Chester H. Miller, with offices in the Foxcroft Building, San Francisco, has opened an Oakland office at 315 Pantages Building.

W. E. Dennison, president and manager of the Steiger Terra Cotta and Pottery Works, has returned from a hunting trip to Sierra City.

T. G. Arrowsmith, representing the Hoffman Heater Company of Lorain, Ohio, is on an extended trip through Southern California.

Alto H. Mohr, president of the Mohrlite Company, 249 Minna street, San Francisco, has returned from an extended business trip to the Eastern States.

The Watson Mantel and Tile Company, 457 Market street, San Francisco, have received their new fall catalogue and price list from the printer and are sending it to the trade.

The National Architectural and Engineering Company, Inc., have moved their offices from the Foxcroft Building to 604 First National Bank Building.

Architect Harvey Partridge Smith, with offices at 232 Blake Block, Oakland, California, is on an extended trip to Chicago, going by Minneapolis, returning via San Antonio, Texas.

Leonard H. Ford has opened an architectural office at 2136 Center street, Berkeley, and would like samples and catalogues from material houses.

E. H. Bellows, manager of the Pacific Wall Bed Manufacturing Company, Bankers' Investment Building, has returned from an extended trip to the Eastern States in the interest of the wall bed business.

Mr. Lilley, of Lilley & Thurston, dealers in building materials, has returned from a month's trip spent in the East, visiting the different factories that they represent on the Pacific Coast.

R. N. Nason, of R. N. Nason & Co., the well known paint house, is on an extended tour of the Eastern States. Mr. Nason will return via Winnipeg and Vancouver, B. C.

A. Gehri & Co., Tacoma, Wash., have the contract for the sheet metal and plumbing on the Lincoln Park High School at Tacoma. Heath & Gove, architects.

Architects Heath & Gove, Tacoma, Wash., have awarded the general contract on the Lincoln Park High School to Olson & Young, general contractors, Tacoma, Wash.

Architects Wright & Rushforth, with offices 571 California street, announce that they have moved their Vancouver, B. C., offices from 709 Dunsmuir street to 411 Pacific Building, same city.

Architects Sweatt, Levesque & Co., Spokane, announce that they have opened a branch office at Great Falls, Mont. The manager of the new office would like catalogues and samples from material houses.

Architect Elmore R. Jeffery, Los Angeles, Cal., is on an extended business and pleasure trip to the East. He will visit Minneapolis, Chicago, Milwaukee and other cities, returning via the Canadian Pacific route and stopping at Vancouver and other Coast cities.

Architects Paul V. Tuttle and E. L. Hopkins, Los Angeles, Cal., have dissolved partnership by mutual consent. Mr. Hopkns will retain the office at 616 Delta Building and Mr. Tuttle has opened offices at 619 Delta Building. Catalogues and samples from dealers will be appreciated.

T. G. Arrowsmith, Pacific Coast sales manager for the Hoffman Heater Company of Lorain, Ohio, has made connections with Holbrook, Merrill & Stetson to handle the Hoffman Heater in California, having just closed an order with his firm for a carload of heaters, which consists of the full line, the same to be equipped with the very latest device thermostat controling the flow of gas direct with the water valve, eliminating all heater trouble such as other heating companies have to contend with.

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CALIFORNIA

Apartment House—Architects C. M. and Arthur [illegible] Monadnock Building, have prepared plans and working drawings for an eight story and basement reinforced concrete apartment building for the Portola Realty Company. The cost will be $[illegible].

Machine Shop—Architects Wells & Carey, Merchants National Bank Building, have prepared plans for a [illegible] building for Thomas Ford, to cost $5,000.

Power Station—Architect Frederick H. Meyer, Barnett Investment Building, has prepared plans for a [illegible]

station for the San Francisco Gas and Electric Company, to cost $30,000.

Hospital—Architect Thomas O'Connor, San Rafael, Cal., has prepared plans for a two-story brick and reinforced concrete building, to cost $45,000.

Theatre—Sacramento. Architect A. W. Cornelius, San Francisco, has prepared plans for a vandeville theatre building for Turner & Dahnken, to cost $75,000.

Store and Loft Building—Architects Julius Krafft & Son, Phelan Building, have prepared plans for a two-story and basement store and loft building for A. J. Donzel, to cost $10,000.

Apartment House—Architect Arthur Scholtz, Phelan Building, has prepared plans for a three-story and basement frame and plaster apartment house for A. Merten, to cost $12,000.

Synagogue—Oakland. Architect G. A. Lansburgh, Gunst Building, has prepared plans for the new temple for the First Hebrew Congregation, Oakland, Cal.

Town Hall—Burlingame. Architect Charles Peter Weeks, Mutual Savings Bank Building, has prepared plans and specifications for the new town hall to be erected at Burlingame, to cost $20,000.

Residence—Oakland. Architect C. W. McCall, Central Bank Building, Oakland, Cal., has prepared plans for a two-story and basement frame and plaster residence for A. E. Grimmwood, to cost $5,000.

Hotel Building—Architect William Wilde, Albany Building, Oakland, has prepared plans for a six-story brick and steel hotel building to be built at the corner of Eleventh and Franklin streets, Oakland, for Charles Street, to cost $60,000

Office Building—Architects Willis Polk & Co., Merchants Exchange Building, have prepared plans for a ten-story addition to the Mills Building for D. O. Mills, to cost $500,000.

Hotel Building—Architects Fabre & Bearwald, Merchants National Bank Building, have prepared plans for a five-story steel and frame concrete building to be built at Seventh and Stevenson streets for Vayssie Brothers, to cost $60,000.

Parish House—Oakland. Architect William A. Newman, Hughes Building, San Francisco, has prepared plans for a one-story frame and plaster parish house to be built on Shafter and College avenue, Oakland, for the Olivet Congregational Church, to cost $6,500.

Catholic Church—Dixon, Solano county. The parishioners of the St. Peters Catholic Church are making plans for the erection of a new church edifice to cost $25,000 or more.

Lodge Building—Architect William D. Shea, Marsden Building, has prepared plans for a Class A lodge and library building to be built on the north side of Oak street, west of Van Ness avenue, for the Young Men's Institute, to cost $160,000.

Store Building—Architect William H. Crim Jr., 425 Kearny street, is preparing plans for a one-story and basement brick store building on the south side of Sutter, between Market and Post, for Florence N. Ward, to cost $12,500.

County Jail—Santa Rosa. Architect J. W. Dolliver, San Francisco, has plans accepted for the new county jail to be built of reinforced concrete.

Loft Building—Los Angeles. Architects John C. Austen and W. G. Pennell, 1015 Wright & Callander Building, Los Angeles, have prepared plans for a thirteen-story and basement Class A loft building to be of steel frame and brick construction, built for the Mason estate.

Hospital Building—Los Angeles. Architects Garrett & Farell, 405 Currier Building, have prepared plans for a new hospital building to be erected at the corner of College and Gastellar streets for the French Hospital Association. The building will be of reinforced concrete construction, to cost $50,000.

Apartment House—Architects Righetti & Headman, Phelan Building, have prepared plans for a three-story frame and basement apartment building to be built at the corner of Green and Montgomery streets, San Francisco, for C. Favilla, to cost $12,000.

Residence—Oakland. Architect John H. Thomas, First National Bank Building, Berkeley, has prepared plans for a two-story and basement frame and plaster residence to cost $6,000

Elks' Building—Berkeley. Architect W. H. Ratcliff, First National Bank Building, Berkeley, has prepared plans for a three-story and basement building to be constructed of reinforced concrete, to cost $120,000.

Packing Plant—Sacramento. Architects Seadler & Hoan, Forum Building, Sacramento, have prepared plans for a $50,000 packing plant to be erected for Swanston & Son on the American river, north of Sacramento.

Infirmary Building—San Rafael. Architect Thomas O'Connor has prepared plans for a two-story and basement brick and steel building to be built at San Rafael, to cost $40,000.

Bank Building—San Diego. Architect T. C. Kistner has been commissioned to prepare plans for a six-story fireproof structure to be built on the west side of Third street for the Southern Title Guarantee Company, to cost $125,000.

Apartment House—Fresno. Architect J. D. Statham is planning an $80,000 apartment house at the corner of Mariposa and A streets, work to commence at once.

Hotel Building—Architects Ross & Burgren, 310 California street, have prepared plans for a five-story Class C building to contain 60 rooms, to cost $40,000.

Residence—Mountain View. Architect John Bauer, Clunie Building, San Francisco, has prepared plans for a two-story and basement frame and plaster country residence for Mrs. Bowman, to cost $6,500.

Apartment House—Architects Falsh & Knoll, Hearst Building, are preparing plans for a six-story and basement Class C apartment house on Sutter street, between Jones and Leavenworth, for J. H. Hyal, to cost $125,000.

Residence—Alameda. Architect Leonard H. Ford, 2136 Center street, Berkeley, has prepared plans for a two-story frame residence to be erected in Water Side Terrace, Alameda, for W. D. Howe.

Garage—Architect Fred H. Meyer, Bankers Investment Building, San Francisco, has prepared plans for a reinforced concrete garage and automobile sales building on Van Ness avenue, between Geary and Post streets, to cost $100,000.

Power Station—Architect Frederick H. Meyer, Bankers Investment Building, San Francisco, has prepared plans for a 50x75-foot steel and frame power station for the San Francisco Gas & Electric Co., to cost $30,000.

Residence—Architect D. C. Coleman, Merchants National Bank Building, is preparing plans for a two-story and basement brick veneer residence to be erected on Vallejo street west of Laguna, for R. B. Murdock, to cost $15,000.

Residence—Architects Dunn & Kearns, Monadnock Building, are preparing plans for a $10,000 residence to be built at Easton; also one to cost about $6,500 to be erected at San Carlos.

Garage—Architect Herman Barth, 12 Geary street, has prepared plans for a one-story and basement reinforced concrete garage and sales building on the southeast corner of Van Ness avenue and Pacific street, San Francisco, for Dr. Martin Krotosayner, to cost $16,000.

Residence—Architects O'Brien & Werner, Foxcroft Building, San Francisco, have prepared plans for a two-story and basement and attic frame and brick dwelling to be erected on Presidio avenue, between Laurel and Locust streets, San Francisco, for Abbott A. Hanks, to cost $12,000.

Apartment House—Architect Albert Farr, Foxcroft Building, has been commissioned to prepare plans for two apartment houses for the Metropolis Investment Company, at 332 Bush street, to cost about $70,000.

Residence—Architect M. J. Lyon & Co., Nevada Bank Building, has prepared plans for a two-story frame basement plaster residence for Gass Brothers, to be erected at St. Francis Wood, San Francisco, and to cost $7,500

Apartment House—Oakland. Architect C. W. McCall, Central Bank Building, has prepared plans for a six-story and basement steel frame brick apartment house to be erected at Twelfth and Grove streets for the Bruguire estate to cost $70,000.

Store and Hotel Building—Oakland. Architect F. D. Voorhees Central Bank Building, Oakland, has prepared plans for a seven-story steel frame and reinforced concrete and brick hotel building to be erected at Thirteenth and Webster streets, Oakland, for H. A. Powell, to cost $75,000.

Store Building—Oakland. Architect C. W. Dickey, Central Bank Building, Oakland, is preparing plans for a two-story and basement steel and brick store and loft building on Webster street, Oakland, for Joseph King, to cost $12,000.

Y. W. C. A. Building—Oakland. Architect Miss Julia Morgan, Merchants' Exchange Building, San Francisco, has prepared plans for a four-story steel frame and brick walls faced with white pressed brick and terra cotta. The building will be devoted entirely to the association, containing club rooms, assembly hall, gymnasium, plunge bath and dining room, and all modern improvements, to cost $125,000.

Residence—Architects Willis Polk & Co., Merchants Exchange Building, have prepared plans for a $40,000 residence for Mr. Albert Herman to be erected at 2880 Broadway, San Francisco.

Hotel and Store Building—Porterville. Architect George W. Kelham, Sharon Building, San Francisco, has prepared plans for a two-story and basement steel and brick store and hotel building for the Bradley Company, to cost $20,000.

Store and Loft Building—Architect Theodore Lenzen, Humboldt Bank Building, San Francisco, has prepared plans for a two-story and basement steel and brick store and loft building on the north side of Market street, east of Van Ness avenue, for A. Freed, to cost $15,000.

Club House—Bakersfield. Architect T. B. Wiseman has prepared plans for a two-story and basement building on the corner of Nineteenth and F streets, for the Bakersfield Club, to cost $34,500.

Store Building—Fresno. Architects Swartz, Hotchkin & Swartz, Rowell Building, Fresno, have prepared plans for a two-

story brick store and rooming house building to be erected on J street, near Merced, for C. W. Musick, to cost $18,000.

Apartment House—Architect Frederick H. Meyer, Bankers Investment Building, San Francisco, is preparing plans for a six-story steel frame apartment house building on the corner of Sutter and Jones streets for Messrs. Starr & Larsen, to cost $100,000.

Museum—Palo Alto. Architect Frederick H. Meyer, Bankers Investment Building, has prepared plans for the reconstruction of the museum at Stanford University, to cost $150,000.

Museum—Architect Lewis P. Hobart, Crocker Building, San Francisco. The preliminary sketches have been approved and the building committee at its last meeting instructed the architect to complete the working drawings at once for the $120,000 Science Museum to be erected in Golden Gate Park.

Hotel Building—Architect G. A. Lansburgh, Gunst Building, has prepared plans for a six-story and basement steel frame Class C hotel building to be erected on the north side of Sutter street, between Leavenworth and Jones, for A. Eisenberg, to cost $65,000.

Warehouse—Sacramento. Architect E. C. Cuff is preparing plans for a six story reinforced concrete warehouse to be erected on Twelfth street, Sacramento, for the Sacramento Warehouse Company, to cost $195,000.

Masonic Temple—Sacramento. Architect R. A. Herold, Forum Building, Sacramento, has been commissioned by the Sacramento Masonic Hall Building Association to prepare plans for the new Masonic Temple, to cost $450,000, to be erected at the corner of Twelfth and J streets.

Apartment House—Architect Edward T. Foulkes, Crocker Building, San Francisco, has prepared plans for a four story and basement Class C apartment house to be erected on Bush street, near Stockton, to cost $60,000.

Garage—Architects Miller & Colmesnil, Lick Building, San Francisco, are preparing plans for a one story basement steel and brick garage to be erected at Steiner and Ellis streets, San Francisco, for the Cool estate. The same architects are completing the working drawings for a Class A three story addition to the Metropolitan Insurance Building at Pine and Stockton streets, San Francisco, to cost $100,000.

Apartment House—Architect O. R. Thayer, Merchants National Bank Building, is preparing plans for a four story Class C apartment house to be erected on Post street, to cost $50,000.

Apartment Hotel—Architects Dunn & Kearns, Monadnock Building, San Francisco, have prepared plans for a six-story Class A apartment hotel to be erected on the northwest corner of Post and Leavenworth streets, for George M. Caesar, to cost $150,000.

Wholesale House—Architects Bakewell & Brown, 251 Kearny street, San Francisco, have prepared plans for a three-story mill construction wholesale house on the northwest corner of Spear and Howard streets for Orville C. Pratt, at the cost of $60,000.

Church—Architects Reid Brothers, San Francisco, have prepared plans for a Class A church building for the Congregational Church to be erected on the southeast corner of Post and Mason streets.

Apartment House—Architect Charles J. Rousseau, Phelan Building, San Francisco, has prepared plans for a seven-story and basement steel frame brick apartment house on the south side of Post street, between Jones and Leavenworth, for John Block, to cost $70,000.

School Building—Architect Houghton Sawyer, Shreve Building, has prepared plans for a Class A steel frame brick and stone exterior and tile roof school building for the Cooper School to be erected at Jones and Lombard streets.

Residence—Los Angeles. Architect H. H. Whitley, 801 Story Building, has prepared plans for a two-story frame and plaster residence for S. M. Cooper, to cost $8,000.

Apartments—Los Angeles. The Main Building and Investment Company, 400 Thorpe Building, are preparing plans for a three story and basement apartment house on Bonnie Brae street, near Fifth, for W. R. Neeland, to cost $45,000.

Landscape Work—Los Angeles. Architect Elmer Grey, 812 Wright & Callender Building, has been commissioned to prepare plans for the grounds of the new Polytechnic High School at Pasadena.

Residence—Los Angeles. Architect Frank M. Tyler, 908 Black Building, has prepared plans for a two-story frame residence to be erected on the corner of Twenty-fifth street and Eleventh avenue, for Mr. Engel.

Exposition Buildings—Architect Wilbur D. Cook Jr., 520 Los Angeles Investment Building, has been commissioned to prepare plans for permanent exposition buildings to be erected at Albuquerque, N. M., to cost about $200,000.

School Buildings—Los Angeles. Architect E. L. Hopkins, 610 Delta Building, is preparing plans for a one story brick bungalow for teachers, to be erected for the Wineville School District.

Brick Building—Los Angeles. Architects Hunt & Burns, 701 Laughlin Building, have prepared plans for a one story brick store building to be erected on Monsta avenue, near Forty-sixth street, for John Hora.

Hotel Building—Los Angeles. Architect Frederick Noonan, 904 Wright & Callender Building, has prepared plans for a reinforced concrete hotel building to be erected on Spring street, south of Fourth, for S. W. Stewart.

Residence—Los Angeles. Architect Thomas Patterson, 427 Higgins Building, is preparing plans for a two-story brick residence to be erected at Edendale for Mr. Linnehan.

Apartment House—Los Angeles. Architect E. F. B. Mercardo, 501 Bank Building, has prepared plans for a two-story frame and plaster apartment building at 5806 Hollywood Boulevard for W. N. Freeman, to cost $14,000.

High School—Los Angeles. Architect George W. Billings, 521 Los Angeles Investment Building, has prepared plans for a new brick high school building to be erected at Huntington Park.

High School—Los Angeles. Architects Taylor & Hopkins, 610 Delta Building, have been commissioned to prepare plans for a one-story and basement brick high school building to be erected at Banning, to cost $23,000.

Office Building—Los Angeles. Architect E. H. Dear, 1017 South Main street, has prepared plans for a four-story and basement brick building to be erected at South and Beacon streets, San Pedro, for N. O. Anderson.

Store and Lodge Building—Los Angeles. Architect Thornton Fitzhugh, 480 Pacific Electric Building, has completed plans for a three-story and basement Class C brick store and lodge building to be erected at San Pedro for the Masonic Temple Association, to cost about $40,000.

Masonic Temple—Los Angeles. Architects Train & Williams, 226 Exchange Building, have prepared plans for the Masonic Temple to be erected at 923 Grand View avenue, for West Lake Lodge, F. & A. M. The building will be two stories and basement.

OREGON

Factory and Office—Portland. Architects Jacobberger & Smith, Board of Trade Building, have prepared plans for a factory building and offices for the Doernbecker Manufacturing Company. The building will be 60x160 feet.

Residence—Portland. Architects Claussen & Claussen, Marlay Building, have prepared plans for a two-story frame and tile residence, to cost $6,500.

Lodge Building—Dufur. Architects S. E. Watkins & Son, Newburg, Ore., are preparing plans for a $14,000 lodge building for the I. O. O. F. lodge to be erected at Dufur.

Library—St. Johns. Architects Johnson & Mayer, Commercial Club Building, Portland, are preparing plans for a Carnegie Library to be erected by the city of St. Johns. The building will be one story and basement and will be faced with pressed brick.

School Building—Banks. Architect George R. Kingsley has prepared plans for a school building that will be two stories and basement, 50x60 feet.

Masonic Lodge—McMinnville. Architect A. C. Rembert, Ainsworth Building, Portland, has prepared plans for a 40x80 pressed brick lodge building for the Masons at McMinnville.

Bank Building—Forest Grove. Architect W. B. Bell, Worcester Building, Portland, has prepared plans for a two-story brick bank and office building to be erected at Forest Grove.

School Addition—Portland. School Architect F. A. Vanderpool has prepared plans for a frame addition to the Highland School at Sixty-second and Wygant streets.

Business Block—Portland. Architects Emil Schmitz & Son, Commonwealth Building, Portland, have prepared plans for a fireproof structure to be erected for a local business house, to cost $40,000.

Church Building—Roseburg. Architects Tourtellotte & Hummel, Rothchild Building, Portland, have prepared plans for a Colonial style church to be erected at Roseburg for the First Methodist Church, to cost $15,000.

School Building—Cottage Grove. Architects Tourtellotte & Hummel, Rothchild Building, Portland, have prepared plans and specifications for a two-story brick school building to be erected at Cottage Grove.

WASHINGTON

Lodge Building—Colfax. Architect William Sweet, Pullman, Wash., has prepared plans for a two-story brick building for the Knights of Pythias at Colfax, to cost $15,000.

Theatre—Yosemite. Architect E. S. Dietz at Montana has prepared plans for a 60x180 foot theatre. Interior building by T. L. Matteson, to cost $20,000.

Church—Spokane. Architect Charles F. Choteau has prepared plans for a church which have been accepted by the Christian Society. The building will be stone and brick and will cost about $12,000.

Library—Seattle. Architect W. Marbury Somervell, Seattle, has prepared plans for the Youth Memorial Library Building. It will be two stories, interior finish and brick and cost $40,000.

Hotel Building—Seattle. Architect A. Wickersham, Lyon Building, Seattle, has prepared plans for a three-story and basement 96x100-foot brick and mill constructed store and hotel building for the Yesler estate at a cost of about $100,000.

Factory Building—Seattle. Architects Steven & Steven, New York Block, are preparing plans for a factory addition to the plant of Broderick & Bascom Co. The building will be a one-story 85x210-foot fireproof brick and steel construction.

Depot—Spokane. The O. W. R. & N. Co. and the C. M. & P. S. Ry. Co. will erect a Union Depot, four-story and basement, 152x300 feet of steel reinforced concrete construction faced with brick and terra cotta, and will cost about $500,000.

Mausoleum—Snohomish. The Northwestern Mausoleum Company, White Building, Seattle, will build a $25,000 steel and concrete mausoleum for Snohomish. W. Marbury Somerville, architect, White Building, Seattle.

Dormitory—Port Orchard. Architects Heath & Gove, National Realty Building, Tacoma, have prepared plans for a $100,000 dormitory for the Washington Veterans' Home at Port Orchard. The same architects have plans ready for a two-story $10,000 brick Episcopal Church at Aberdeen.

School Building—Aberdeen. Architect Watson Vernon, Aberdeen, has had plans accepted for the new $75,000 school building to be erected in that city.

Court House—Walla Walla. Architect Henry Osterman has been commissioned by the county commissioners to prepare plans for a new court house at a cost not to exceed $200,000.

School Building—Auburn. Five rural school districts have consolidated and will build a $25,000 school building in the near future.

Gymnasium—Eatonville. Architects Bullard & Hill, Tacoma, have prepared plans for the new $15,000 gymnasium to be erected at Eatonville.

Church Building—Tacoma. Architects Woodruffe & Constable, Fidelity Building, Tacoma, are completing plans for a $20,000 church building for the Holy Communion.

Library—Olympia. The Carnegie Library has announced it will build a $25,000 library at Olympia.

Apartment House—Seattle. Architect V. W. Voorhees, Eitel Building, Seattle, are preparing plans for a two-story 40x54-foot frame apartment house to be erected on Twelfth avenue for C. A. Neal at a cost of $8,000.

BRITISH COLUMBIA

Postoffice Sub-Station—Vancouver. Architect A. Campbell Hope, Empire Building, has been commissioned to prepare plans for the new postoffice sub-station to be erected in Mount Pleasant by the Dominion authorities. The building will be fireproof and cost about $100,000.

Garage—Vancouver. Architect William Frederick Gardiner, 347 Pender street west, has prepared plans for a reinforced concrete garage building in Seymour street for the Northwest Trust Company.

Garage—Vancouver. Architects Sharp & Thompson, London Building, have prepared plans for a reinforced concrete garage building on Georgia street. The building will be 60x80 feet and two stories in height, terra cotta exterior.

Residence—Vancouver. Architects Doctor Stewart & Davies, Bower Building, have prepared plans for a two-story and basement residence for Dr. J. Milton Jones on Fifteenth avenue, to cost about $6,500.

Residence—Victoria. Architect A. C. Feree has prepared plans for a handsome residence for R. H. Green, to cost $10,000. The same architect prepared plans for a residence for A. W. Beal, to cost $3,500.

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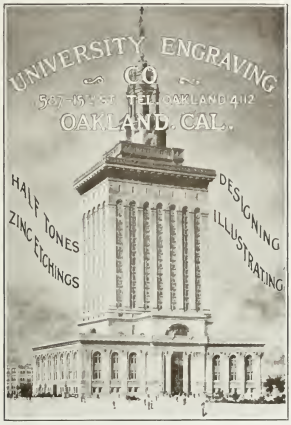

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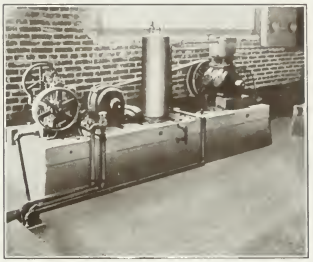

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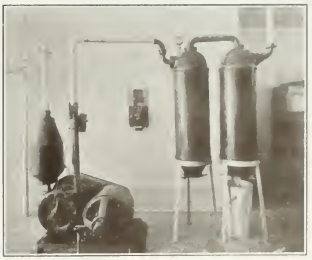

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THE PACIFIC COAST ARCHITECT

A·MONTHLY·JOURNAL·FOR·THE ARCHITECTURAL · INTERESTS

SAN FRANCISCO
CALIFORNIA

VOLUME FIVE
NUMBER SIX

SEPTEMBER, 1913

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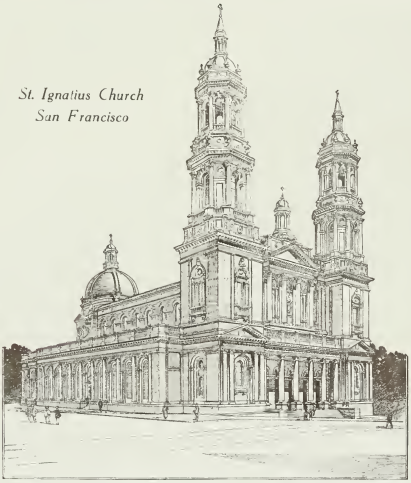

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The Pacific Coast Architect

VOLUME V — SAN FRANCISCO, CALIFORNIA, SEPTEMBER, 1913 — NUMBER 6

COAST PUBLISHING COMPANY, Inc., Publishers

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self-addressed envelopes must accompany all such contributions.

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Current Comment

"The successful architect is he who, recognizing the achievements of the honest and reliable contractors, does not hesitate to recommend them to his clients as firms from whom the best results can be expected, thus insuring prompt and efficient service for the owners and architect and a legitimate profit for the contractor."

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The Leaning Tower of Pisa, Italy, which for many generations has been a great source of revenue to Italians in the money paid by tourists, is reported to be weakening at the foundation. Much work must be done to save it from falling, for water has seeped into the foundation from the River Arno. The water is to be drained off and the base is to be widened and filled to the level of the ground with concrete.

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The Society of Architects, London, considering it desirable in the public interest that persons requiring professional aid in architecture should be enabled to distinguish qualified from unqualified practitioners, and that steps should be taken to prevent incompetent persons from posing as architects, have to that end drafted "A Bill for the Registration of Architects." This will be presented in due form to Parliament.

The following present some of the reasons for their action in this regard: "Architects have the spending in the aggregate of vast sums of public money and the control of matters affecting the life, health, convenience and financial interests of a very large section of the community. The practice of architecture calls for the possession and exercise of many and varied gifts and attainments, chief among which are, artistic sense and feeling, scientific and professional knowledge, practical skill, and business ability. The various architectural bodies publish registers of their members, but the value of these lists of architects as a guide and protection to the public is very considerably discounted by the fact that the public directories necessarily schedule under the title of "architect" without reference to his qualifications, any person who claims that designation, whether justified or not. The proposal for the registration of architects is not a new one, nor does it introduce any new principle. It is merely carrying to its logical conclusion of state registration, the present voluntary system of registration of their members by the various architectural bodies. Registration is in force in several European countries, many of the American States, and a number of our own Dominions, while others are applying for it.—Construction.

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System of Lighting for Surgical Operations

A system of lighting recently perfected appears to solve one of the perplexing problems connected with surgical operations, that of a satisfactory illumination of the operating field. Eight 25-watt tungsten globes, operating on the ordinary street lighting current of 110 volts, and arranged in a 6-foot circle near the ceiling line, throw their light in such a way that the rays from opposite globes intersect at an angle of 45 deg. at the field of operation. This, it is claimed, cuts out all the shadows that obscure the depths of certain wounds and enables the surgeon to perform delicate manipulations with ease and certainty that were formerly performed under considerable difficulties. The globes are mosted and are carried in ellipsoidal reflectors somewhat similar to those used on automobiles. Since the illumination is placed at the ceiling line there is little heat to interfere with the work of the operator. General illumination of the room is provided for by means of other lights.

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University of Michigan Department of Architecture

At the last meeting of the Board of Regents of the University of Michigan an important step was taken towards placing the Department of Architecture on a better footing. When that department was organized seven years ago it was made a sub-department of the Department of Engineering for convenience of administration. The action just taken by the Board of Regents makes the Department of Architecture coordinate with the Department of Engineering. While henceforth there will continue to be one dean for the new organization known as the Departments of Engineering and Architecture, the latter department will admit no students and have complete control of its courses of study as in the case of other major departments or colleges of the university. The recognition thus granted the Department of Architecture will be in great advantage in many respects and will help create an esprit better spirit than formerly, while this step needs no comment with the leaders of the leading architects.

San Francisco Building Operations

Building operations for the month of August in San Francisco were less than for the preceding month of July. Altogether there was a total of recorded contracts and building permits amounting to $1,755,666. This was for private construction only. It was divided as follows: Brick and fireproof construction $867,321; frame buildings, $712,337; alterations and additions, $144,143; Panama-Pacific contracts, $31,365. To these may be added city work and construction amounting to $1,089,279, making in all a grand total of $2,844,945.

While August was less than June and July, as a general thing August is lax in building activity. Comparative figures from the files of this paper, for private construction outside of the Panama-Pacific work for the last ten years, are as follows:

August, 1904	$1,565,568
August, 1905	1,579,514
August, 1906	5,640,508
August, 1907	4,030,087
August, 1908	2,597,110
August, 1909	2,588,723
August, 1910	1,743,587
August, 1911	1,686,518
August, 1912	1,797,408
August, 1913	1,723,801

It will thus be seen that the figures for the last four years have been practically the same for the month of August. So that while things generally have been dull and a general complaint that there is nothing doing, still the fact remains that contracts were let to somebody for about the usual amount of construction. No government work was contracted for during the month of August nor was there any work done by the State within the city limits. Generally speaking the month has been about an average one and the prospects seem to be that the advancing year will bring better business toward the close.—Building and Industrial News.

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San Francisco Architect Is Awarded First Prize

Loring P. Rixford has been placed first in the competition for the Royal Provincial Jubilee Hospital, Victoria, B. C. The prize plans receive a premium of $1,500.

Somervell & Putnum of Vancouver were given second place and James & Davidson of Vancouver, third. The second premium is $1,000 and the third $500.

The awards of the advising architect, J. D. Atchison, of Winnipeg, were adopted by the board of directors of the hospital on the ground that the three sets had most carefully considered the arranging of the hospital to assure convenience of modern hospital design.

In his report Mr. Atchison said: "There were 50 sets of drawings, all of which complied with the requirements of the programme, and many were of such exceptional merit that I had great difficulty in making a final selection. Each of these designs shows that the author has made a careful study of this particular problem as well as the administration and design of hospitals in general. In closing I wish to congratulate you on the number of meritorious designs submitted, as a result no doubt of the conditions of competition as prepared by you."

It is understood Mr. Rixford's plan is the most economical, exhibiting besides the fullest knowledge of the site and its possibilities. It has also a dignified front elevation toward the cricket ground.

Tacoma Architects Make Campaign

The local architects have taken up a campaign against the drafting of tentative plans in competition with each other. The matter was brought up at a recent noon-day luncheon attended by nearly all of the architects of the city. Several of the leading men of the profession have already come out as opposed to the system which drains the resources of the architect, usually for naught. They were the first to break the ice and they reported that they had made, if not an enemy, at least an "unfriend" of the builders who wanted competitive plans without cost. Nevertheless, the other architects of the city have backed them up and also refused to take the job on a competitive basis. As the local architects have not adopted a resolution taking official cognizance of the matter, some of the members of the association are strongly urging that such a step be taken to do away with the tentative plan work altogether. This will probably be brought up at a meeting in the near future.

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Best Architectural Work in the United States

The American Federation of Arts recently undertook to ascertain what were the most satisfactory examples of architecture in the United States and to this end invited an expression of opinion from a selected list of persons including members of the Federation, prominent supervisors and artists, sculptors and others having a reputation for taste. The result of the canvass showed the following twenty public buildings to lead the list, and of this list it will be observed that nine are in New York City:

Boston Public Library.
Capitol at Washington.
New York Public Library.
Pennsylvania Railroad Station, New York.
Trinity Church, Boston.
Columbia University Library.
Congressional Library, Washington.
J. P. Morgan's Art Museum, New York.
Minnesota State House.
Madison Square Garden.
St. Patrick's Cathedral, New York.
Cathedral of St. John the Divine, New York.
West Point Military Academy.
White House, Washington.
New York City Hall.
University of Virginia.
Toledo Art Museum.
Union Station, Washington.
W. K. Vanderbilt's House, New York.
Pan-American Building, Washington.

Following the initial twenty is placed the Metropolitan Tower, University Club and Trinity Church in New York City, and the Museum of Fine Arts in Boston.

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Supreme Court Rules in Favor of Architect

An architect has a lien against a building for which he has been engaged to prepare plans and supervise construction, the same as a laborer or material man, the Supreme Court held in the King County case of A. W. Gould against R. C. McCormick. The question has been in dispute under the Washington statute which gives a lien to a person "performing labor upon or furnishing material used in" the construction of a building.

Style in American Architecture

By R. A. Cram.

The various followings in architecture to-day are so many and manifest that he who runs may read. One is minded, therefore, to say less about style and styles and half a style than of impulse—or the impulses, for they are legion—behind them, and of the goal to which in devious ways they are all tending. Chaos is the only word that one can justly apply to the quaint and inconsequent conceits in which we have indulged since that monumental moment in the early nineteenth century, when, architecturally, all that has been since the beginning ceased, and that which had never been before on hand or sea began. Retrospection carries us back to the decade between 1820 and 1830, and there we find a reasonably firm foothold. Here, at last, at the beginning of the century, we discover actual unanimity, and with some relief we go back century after century, tracing variations, but discovering no precedent for the chaos we have left. We all know what our own Colonial was like; perhaps we do not fully realize how varied it was as between one section and another, but at least we appreciate its simplicity and directness, its honesty, its native refinement and delicacy, its frequent originality. It isn't the same as English Georgian; sometimes it is distinctly better, and, however humble or colloquial, it is marked always by extreme good taste. If anything, it improved during the almost two centuries of colonial growth, and when the nineteenth century opened it was still instinct with life. A half century later where were we? Remember 1850, and all that date connotes of structural dishonesty, stylistic barbarism and general ugliness. Here is the debatable period, and we may narrow it; for in 1810 and in 1820, good work was still being done, while in 1840, yes, in 1830, the sodden savagery, diluted with shameless artifice, was widely prevalent.

To me, this decade between 1820 and 1830 is one of the great moments in architectural history, for then the last flicker of instinctive art amongst men died away, and a new period came in. Eighteen hundred and ninety, and we start again. Two tendencies are clear and explicit. A new and revified classic with McKim as its protagonist, and a new gothic. The first splits up at once into three lines of development: pure classic, beaux-arts and colonial—each vital, brilliant and beautiful in varying degrees. The second was and remains more or less one, a taking over of the late gothic of England and prolonging it into new fields, sometimes into new beauties. And now two new elements enter, steel frame construction on the one hand and on the other the secessionist. The steel frame is the enfant terrible of architecture, but like so many of the genus it may grow up to be a serious-minded citizen and a good father. It isn't that now, it is a menace not only to architecture but to society; but it is young and is having its fling. If we can't make it realize that it is a new force, not a substitute, we shall do well. When it contents itself in its own sphere and the municipality says kindly but firmly, "thus far and no further"—the "thus far" being about 125 feet above street level, as in the very wise town of Boston, then it may be a good servant. Like all good servants it makes the worst possible master, and when it claims as its chiefest virtue that it enables us to reproduce the baths at Caracalla, vaults and all, at half the price, or build a second Chartres Cathedral with no danger from thrusting arches, and with flying buttresses that may be content beautifully to exist, since they will have no other work to do, then it is time to call a halt. The foundation of good architecture is structural integrity; and it doesn't matter how beautiful a building is, if its columns merely hide the working steel within, if its vast vaults are plaster on steel frame and expanded metal, then it isn't architecture, it is scene painting, and it takes its place with the other scene painting of the later Renaissance to which we mistakenly apply the name of architecture.

The secessionist—one might sometimes call him post-impressionist, cubist even—is the latest element to be introduced, and in some ways he is the most interesting. Unlike his confreres in Germany, Spain and Scandinavia, he shows himself little except in minor domestic work—for at heart we are a conservative race, whatever individuals may be—but here he is stimulating. His habitat seems to be Chicago and the Pacific Coast, his governing conviction a strongly developed enmity to archaeological forms of any kind. Some of the little houses of the middle West are striking, quite novel, and mordinately clever; some of the work on the Pacific Coast, particularly around Pasadena, is exquisite, no less. Out of the interplay of these two tendencies much of value may arise.

And there you are: three kinds of classic, two kinds of gothic, skeleton-frame, and secessionist—all are operative to-day, each with its strong following, each, one admits, consummately clever and improving every day; for there is no architectural retrogression in America, there is steady and startling advance, not only in facility for handling and developing styles, but in that far more important affair, recognition of the fact that styles matter far less than style. From a purely professional standpoint the most encouraging thing is the breadth of culture, the philosophical insight into the essence of things, the liberality of judgment that mark so many of the architectural profession to-day. All have found out that architecture is much bigger than its forms, that the fundamental laws are the same for all good styles, and that the things that count are structural integrity, good taste, restraint, vision and significance. No one now would claim with the clangor of trumpets that the day of victory was about to dawn for the beaux arts, Gothic, or steel-frame styles, or for any other; for that matter, each is contributing something to the mysterious alembic we are brewing; and all we hope is that out of it may come the philosopher's stone that, touching inert matter, shall turn into refined gold—which by the way is the proper function of architecture and of all the arts.

Chaos then confronts us, in that there is no single architectural following, but legion; and in that fact lies the honor of our art, for neither is society one, or ever at one with itself. This is one of those great 500-year periods of boiling activity, one of those nulls that periodically divide the vast vibrations of our history, when all things are in flux, when all that has been for four centuries is plunging downward in disintegration, while all that shall be for another equal period is surging upward towards its culmination.

I believe all the wonderful new forces now working hiddenly, or revealing themselves sporadically, will assemble to a new synthesis that will have come in a great epoch of civilization as unified as ours is disunited, as centripetal as ours is centrifugal, as spiritually efficient as ours is materially efficient; and that then will come and cope naturally and inevitably the inevitable art that will be glorious and great, because it shows forth a national character, a national life that also is great and glorious.

Reduced to its simplest terms, American architecture is seen to have had two epochs: first, the unconscious conservation of a definite style (which, whatever its genesis, had become an essential part of our racial char-

acter), and its complete disappearance exactly at the time when the serious and conservative nature of the people of the United States gave place, with an almost equal suddenness, to a new quality born partly of political independence, partly of new and stimulating natural conditions, partly of the back-wash from continental revolution, and above all of the swift working out, at last, of powers latent in the Renaissance-reformation itself. Second, the confused activities of many men of minds who had cut loose from tradition become moribund. Communal interests, the sense of solidarity, inherited from the middle ages and persisting in strange new forms even through the Renaissance epoch itself, had yielded to a crescent individualism, and architecture, like a good art, followed close at heel.

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A Glass Building Twelve Stories High

Something of a decided novelty in the way of a commercial building has just been commenced at the corner of Tenth avenue and Thirty-sixth street, New York City. The architects, Goldwin, Starrett & Van Vleck, have provided the plans for a 12-story skyscraper in which the entire front of the building and its interior sides are to be entirely of glass. In fact, 78 per cent of the walls will be of this material. There will be no openings in the glass facade except those in the front of the building for emergency purposes, but which will not be visible from the street.

Ventilation will be accomplished through a specially devised system of ducts through which will be forced cooled and washed air and let into the offices at whatever temperature the tenants may desire. Humidity will be an unknown quantity, as it will all be washed out of the air, which will be cool, dry and free of all dust. In the winter season this same system will furnish heated air.

Vibration usually noted in buildings where heavy machinery is operated has practically been eliminated and anti-noise has also received attention in other directions. All floors are to be rubber-tired.

It is estimated that the structure will cost approximately $600,000, of which amount $78,000 will cover the cost of the glass. On the interior the glass will be a specially polished plate and for the exterior surface will be a specially treated plate that will not transmit heat waves into the interior.

In the basement will be a power plant which will be one of the most complete of its kind in the world. There will be express and local elevators of the plunger type and special elevators for various floors. The structure will be known as the Hill Engineering Building and the first four floors will be occupied by the Hill Publishing Company. In its quarters there will be electric machines for opening and sealing mail matter, dictaphones and noiseless typewriters. Another feature of this section of the building will be a contrivance for carrying "copy" between two floors, which is said to do the work of 22 "copy" boys. The mail chutes will be sufficiently large to mail whole sacks of matter instead of one or two letters, which is the average capacity.

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New Ice Invention

Consul General Snodgrass in Moscow reports that great interest is being shown in a new invention called "minus ice," which represents a frozen solution of salt of various grades of concentration.

Infested Architecture

Three distinct parasites fasten on our city buildings, confusing their scale, cluttering their base lines, masking their decorations, disheartening in advance to the conscientious architect.

The first is the lettered signboard, made not merely to be seen, but to catch and hold the glance. In some form the sign is a necessary evil. But could it not be reckoned with more boldly by the architects, both in designing elevations and in advising clients after occupation? Some day merchants will come to see that beauty in the wares for sale and in the window schemes for their display calls also for a framing beauty in the whole store front.

The second parasite is the creeping vine. Some buildings deserve it; season by season they need the close mantle of rippling green or the clinging veil of netted runner and tendril. The coarser and heavier the building, the greater its need for some such figure covering. But other buildings, clean cut and pleasantly proportioned, telling a structural story in lines well carried through, or taking the eye with finely wrought texture and detail—these have no need for a kindly covering of blemish and defect; they have a right to be seen bare and in their full design.

The last of the three parasites is neither a necessary evil nor an occasionally pleasing risk; it is an abuse, tolerated only for a trifling convenience for the dollars it brings in. It is the vendor's booth, lodged in any available nook or corner of any building that the crowd passes. The stands of these petty trafficers in post cards, peanuts and penny candies no more regard the walls they huddle up against than the nests of the plastering mud-wasps regard the carvings on the temples of old Egypt.

European cities have made visitors familiar with the so-called "freeing" of cathedrals and other public buildings. In the days when a city's walls were not for romance, but for service, the same pressure that kept streets narrow and houses overhanging finally forced shops and dwellings against the very sides of the noblest buildings. In these later days with the old walls razed for "ring parks" or left standing far down as documents of early history, the cities have been clearing their important buildings of all that has marred their beauty or concealed their merit of design.

Cannot we Americans take the hint?—Boston Herald.

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The Largest Stone Ever Quarried

What is said to be the largest stone ever quarried is a great monolith in the ruins of Baalbec in Syria. It is 69 feet long, 14 feet broad, and 17 feet deep, and is estimated to weigh 1,500 tons. It is thought by archaeological scholars that this huge stone was intended by the ancient builders to adorn the Temple of the Sun near by—now, of course, in ruins.

Here, in one of the walls, which still stand, are to be seen huge slabs of stone, which careful measurements show to be 63 feet long and 13 feet high. And, more remarkable still, they are placed in position 19 feet above the ground level. Moreover, although no sign of any cementing mixture is to be found in these ancient buildings, the stones have been squared and polished so evenly that only after the most minute search can the joints be found, and when traced it is impossible to thrust the blade of a pocket-knife between them.

Architects Angry Over Hotel Law

Local architects who have made a study of the provisions of the new hotel building law are unanimous in their criticism of that act, and some of them go so far to declare that it amounts to confiscation of small and shallow lots, whatever the frontage may be, in downtown sections where apartment houses are not considered as suitable to the location.

The new hotel act was prepared by State Senator Burnett, and it went through committees and both houses of the last Legislature and finally received the approval of the Governor June 16th last, but it was never submitted to a committee of architects or structural engineers. Senator Burnett says that inasmuch as there was no opposition nor even comment on the bill when it was before the Legislature it was deemed satisfactory to all parties concerned, such as real property owners and architects.

Now that the law has gone into effect, however, many objections are heard against its requirements. The intention of the act is to do for hotels and rooming houses what the tenement house law has done for apartment houses—that is, to assure better sanitation and more light and fresh air, but it seems from statements of architects that the new law, while admittedly commendable, has gone the wrong way about accomplishing the desired results. The architects add that what was wanted in framing the act was requisite technical knowledge and skill.

It is no longer possible to build a hotel downtown and have the entire ground floor occupied as a store or stores, and to have light wells or courts begin at the first story. The act provides that there shall be a yard in the rear of the lot extending from the ground up, and this yard must never be less than seven feet deep, while in most lots it must be twelve feet deep. This means that a lot in the shopping sections of the city must have a yard in the rear if a hotel or rooming house is erected above the store. Real estate agents who lease business places say that this enactment cuts the value of small lots downtown, unless such lots can be used for loft buildings, of which there are enough.

In case of a shallow lot with a wide frontage it is said that a court in front or back is the best possible plan for light and air, but this cannot be done, because the rear yard is required, and with the yard deducted there would not be enough ground left for the building and central court. As side or lot-line courts are required to be placed lengthwise, the architect is forbidden from using the same space, as specified in the act crosswise where such a plan would best suit a given lot. On corner lots the store may cover the entire lot, but there must be a yard space from the roof of the store, or second story joists, so that in such hotel buildings there will be an open space in the street line above the store of at least five feet and ranging as wide as seven feet, according to the length of the lot.

Windows in side walls upon lot lines are prohibited for hotels or rooming houses, and the act has been construed to apply to lots where the owner owns the adjoining lot and has a low building there to insure him light and air for his hotel.

Applications for building permits for hotels and lodging houses must be accompanied with affidavits, giving in full the name and address of the owner. If the application is not made by the owner the statement shall contain the name and address of every person interested in the hotel or lodging house, "either as owner, lessee or in any representative capacity."

Upon completion of such building or alteration, and the issuance of certificate of final completion by the building bureau, it is made necessary to get a permit from the Board of Health to occupy the building as a hotel or rooming house. The Board of Health and Board of Works are given power to apply to the courts for orders enforcing the act, and fines imposed for violations are made a lien upon the property involved and a cloud of record upon the title.

Every owner, lessee and person having control of a hotel or lodging house is required to file with the Board of Health a notice containing his name and address and a description of the property by street number and character of the building. In case of a transfer of such building, the grantee must file within thirty days thereafter with the Board of Health a notice of the transfer and the same facts. And where the property passes by will or descent, the executor, administrator or heir must file a similar statement. These names and addresses shall be indexed in the Health Department for public inspection.

Though a State law, the act sets forth that the Board of Health shall provide the necessary books and clerical force necessary to keep this new record, and the expense shall be paid by the city and county. Finally, an annual license is required to be taken out by hotel and lodging house keepers.

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Limit of Skyscrapers Not Yet Reached

By L. C. Breed

The objections, according to some architects, notably C. H. Blackall of Boston, to the skyscraper (meaning in Boston a building over ten stories) are chiefly aesthetic. So far as safety is concerned the limit has not been reached even in New York and in all cities, independent of local restrictions, the height of the building has been simply the financial outlay.

Steel construction would appear to have solved the problem, since, if the base is large enough, the height of the building may be carried to the distance which the investment will permit. Steel embedded in cement is as indestructible as anything on earth—the important feature consists in the necessity of the plans being followed to the letter and all mechanical work done thoroughly and perfectly. The structural strength does not come from externals, but from the steel, and the superiority of modern construction over the old-fashioned stone exterior and column idea of utility has long been conceded.

The problem of protection from wind is but one of serious import, since plumb lines dropped down elevator walls in the Flatiron building during heavy windstorms have indicated but a small degree of vibration. In fact, the weight of a skyscraper is so great that it contributes largely to its own safety.

Among the problems involved in the construction of skyscrapers are the distribution of water and heat. How to get water up thirty to forty stories is a job which perplexes architects and engineers. In the higher buildings of the future it may be found practicable to establish tanks at stated intervals and force the water upward by pumping. The matter of elevators would in a building of extreme height be found to present a difficult problem. Mr. Blackall's idea provides for running them like electric trains, five or six in a well, all moving a loop-like route up and down the structure. Instead of returning over the same route, they would make a continuous journey around the building, going up one side and coming down on the other.

With respect to protection from fire it would seem that no one should claim that it is impossible to build a structure which would be proof against the effects of fire from within or without. If wood is entirely dispensed with, each story cut off from direct communication with the other, all outside windows equipped with wire glass, sprinklers and automatic fire alarms properly installed, it is claimed the fire hazard may be dismissed as being quite within control.

In addition to the complaint of some people regarding the appearance of a city's skyline is the fashion in some quarters to decry these great structures as lacking in proportion and taste, but it is conceivable that in time architects will evolve plans which will render the skyscraper more acceptable from an aesthetic standpoint.

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New York to Have New Skyscraper

A skyscraper whose topmost tower will rise 901 feet above the curb is planned by the Pan-American States Association. Unless plans miscarry, it will be built in this city, constructed wholly of materials from the Latin-American republics, will wrest from the Woolworth building the distinction of being the world's tallest habitable structure and will be ready for occupancy with the opening of the Panama-Pacific Exposition in California in 1915.

Such, at least, are the tentative plans of the promoters. Plans and specifications for the structure have been drawn and will be given to a building committee of the association for review and acceptance. Francis H. Kimball, designer of notable downtown skyscrapers, made the plans. The estimated cost of the structure is $9,000,000. The site has not yet been selected. It is intended to erect the building as an enduring monument to Pan-American industry.

The Woolworth building, now the tallest in the world, is 750 feet high; the Metropolitan, its nearest rival, 700 feet.

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Five Dollars Each for 50,000 Bricks

How to sell 50,000 bricks at $5 each was told to the Ad Club men at a recent luncheon by Judge Jesse J. Dunn of Oklahoma.

The story of the sale of the bricks was narrated in order to stir the Ad Club men to inaugurating a campaign among the Ad Club men of the United States to raise funds in those States that have not already appropriated amounts for Exposition purposes.

Judge Dunn is the Oklahoma Exposition Commissioner, who came here recently to dedicate a site for that State. Oklahoma did not appropriate through its Legislature and money for Exposition purposes, but the Ad Club men, alive to the necessity of their State making a wide participation at the Exposition, started the plan of selling the bricks.

Judge Dunn told the Ad Club men how they got the bricks and what they intended to do with them. Each brick was sold for $5 and the name of the purchaser stamped on it. The bricks will be brought here and used in the construction of Oklahoma's pavilion at the Exposition. At the close of the Fair, the building will be dismantled and the bricks returned to Oklahoma to be used in the building of a school house to commemorate the progressive spirit of Oklahoma's citizens.

The Analogy Between Horse-Racing and Estimating.

By G. Alexander Wright.

May it not truly be said that there is very little difference between horse-racing and bidding on buildings? Are they not "gambles"? The invitation to figure and the jockey's start are similar; both events arouse a like interest; both hope to win. The odds are long, for there are many entries. There is the usual horse-racing talk about the "dark horse," the "favorite," the "pull," the "inside track," and so forth, none of which is probably ever true, in either case; but it is horse-racing talk.

At last the start is made, and away they go! The bidders and the ponies over the same ground, the same course, and the owners look on and speculate. The primary object is to get ahead of each other, win at any cost, and each competitor does his best to beat the other fellow. If the first jockey in has forgotten or omitted anything, he is disqualified. If the bidder forgets or omits anything, he "gets the contract." It amounts to about the same thing, and the bidder is quite as much of a real sport, for he takes his "medicine today and gambles again tomorrow." But this is not what I started out to say, if, perchance, it has had the effect of seriously arresting the reader's attention to a most important subject, some good purpose may yet be served.

And now to be serious: Speaking of estimating in competition, an experienced and well-respected western contractor recently described our present estimating methods to me as "a horse-racer's gamble." Few architects, if they will look squarely at the facts, can honestly differ with the candid western contractor. Owners, and persons not over kindly disposed toward architects, claim that we know but little about the "cost" of a building; but these same people do not themselves know anything of the mysterious and devious processes involved in the obtaining of a bid, which, unfortunately, they too often think is to be the "cost" of the building. Architects, however, know of these things, and that the word "estimate" or "bid" does not really mean the "cost," when the work is finally completed. Architects, however, seldom deem it their duty to enlighten clients upon such matters, and this is especially so in the case of the architect who, by whatever means he may choose to employ, is able to persuade owners into believing that he can give them cheaper and quicker results than some other architect having offices round the corner.

It is not an unusual circumstance for a contractor to sign up for a job, when even the best of us are morally certain that the work as shown and specified, can never be properly done for the money. But we as architects are paid to see that it is so done, are we not? Why then should we allow an owner, or ourselves, to accept such a bid, and so to place this burden upon any contractor, who, for want of a systematic method, under-estimates his quantities, or, as too often happens, omits something entirely? Some owners (happily not all) are looking for these mistakes, and are ready to seize the advantage, usually in the mistaken idea that they are to get something for nothing. Some architects will be perfectly content with the thought (more is the pity!) that it is none of their business; that it is up to the contractor to look out for himself.

It is well known that under our uncertain system of estimating, by which the contractor is made to take all the chances, these things do and must occur; that they are winked at, and that they cause much unnecessary

trouble. But is this good practice, or sharp practice? Surely our ethics should extend beyond the mere personal equation; so, to put it plainly, is it "hone-t?"

Is it just, when we, in a sense, undertake to act as arbiters of the contract? If not, can we wonder at the thousand and one questions, difficulties and extras which occur in the supervision of such a contract, under the present system? Can we wonder that contractors are sometimes suspicious?

But, not to dwell too long on this picture, let us seek a practical remedy for removing these and the other similar conditions which make such a picture possible. The individual architect or owner, let it be said, is not solely responsible. The entire trouble lies in our senseless, wasteful, unscientific, and wholly faulty methods of inviting bids, and in the encouragement to gambling which we, who should be the first to condemn, still extend to bidders. That the contractors do not rise up and smite us, is really a source of wonder to me. Not our business, indeed! It is our business to encourage better and more honorable methods.

The scope and character of our construction has advanced so rapidly and considerably of recent years, that scarcely anything is done now as it was even twenty years ago; and the time now allowed to a contractor for estimating, is altogether too short; conditions are not conducive to accurate results. Without accurate quantities, there can of course be no accurate bids, and with our rough-and-ready guesswork methods, wide differences in bids must necessarily prevail. The lowest bid is usually by no means the most accurate, and frequently it is out of all proportion to the quantity and character of the work under contract. Before the work proceeds very far, the mistake is discovered; then there arises the natural desire of the contractor to save on his contract.

But the difficulties, and sometimes friction, which we meet with upon our buildings in progress are not usually caused by the effort of the lowest bidder (sometimes spoken of by the daily press as the "fortunate" contractor) to make a larger profit than that to which he is entitled; the difficulties are quite as often due to his not unnatural wish to keep his loss on the contract within the smallest possible limit.

Therefore, is it not indisputable that incorrect quantities are in the first place largely responsible for unnecessarily low, and consequently inaccurate bids, which, in their turn, cause so many of the architect's troubles?

Another factor is the too short time allowed to bidders for estimating, while a third and very important factor is found in the fact that our modern methods of construction require special training in order to take off quantities accurately. Few contractors possess these advantages, and even if they did, fewer still could find the time to put the principles of scientific quantity-taking into profitable effect.

The ridiculous—even the ludicrous—side to our present way lies in the fact that when contractors are invited to submit a bid in dollars and cents in competition, off they go (like the race-horses) to compete against each other, neck and neck, as to the quantity of material the job will take; and the more careful a bidder is, in taking off his materials accurately, the less chance he has, under present methods, of getting the job!

The whole business seems absurd to anyone with any pretense to experience in quantity taking. There can only be a certain amount or quantity of material necessary, and no amount of figuring can make it less; it is folly, therefore, to think that a number of bidders on a piece of work will all succeed in taking off just the right quantity; one person might, but not a dozen or more.

If some system could be adopted whereby each bidder would be furnished with a complete detailed list of the exact quantities of materials and labor required in the placing; all bidders on the same basis; then the competent, careful contractor would get more contracts at proper prices, and so be able to do better work, while the incompetent and the shoe string bidders would either have to become more competent, or seek other fields of industry; a result which would prove quite as much of an advantage to architects as it would to the remaining contractors.

It is obvious that some such system must in time displace our present wasteful and primitive method, if for no other reason than for the benefit such a system would confer upon both architect and client. It would seem that much good would result, if the Chapters throughout the country gave some consideration to this vital subject, and familiarized their members with the advantages that would follow the adoption of some standardized method or system of estimating upon quantities. This and other kindred subjects have recently been receiving consideration in certain Chapters, while many architects and contractors in different states are well known to favor the adoption of an estimating system, based upon accurate bills of quantities, which shall become the true basis of the contract. This will certainly be done some day, and then we shall all wonder why so much time, effort, and money has been thrown away in the past.

A Dwelling House of Unusual Construction

A dwelling house involving some rather unique features of construction is under way on the ranch of A. K. Macomber, near Hollister, Cal. The house is in the Moorish style of architecture and a feature will be a patio in the center with a concrete swimming pool, 52x72 feet in size. The house covers a ground area of 124x116 feet and 18 of the rooms will be finished in white cedar and birch. One of the most striking features of this residence, which will be of frame with stucco finish, will be an arch roof of Roman lattice screening supported by five steel girders.

Different Paint Ingredients

Architects and builders should be familiar with the ingredients of paint. Besides the vehicle and pigment paint sometimes contains volatile thinners, such as turpentine or benzine. A drier, in some form, is generally used in oil paints. This drier is a compound of lead or manganese, generally both, soluble in oil and is usually sold under the name of "paint drier" or "paint grains," as a solution of such material in a mixture of oil, turpentine and benzine. An addition of from 1 to 3 per cent of this drier placed in raw oil paint will make it dry in from 6 to 12 hours, sufficiently to be handled. Paints, however, are not sufficiently dry to be used until they have been allowed to stand for at least three days.

No more than 10 per cent of any drier or thinner should be used in any paint. Slow drying paints are more durable than quick drying ones. For exterior surface paintings a mixture of two parts of lead and one part of zinc is much liked. Zinc-lead, however, is the name of an entirely different pigment made by calcining ores containing about equal parts of lead and zinc in which the lead is present as a sulphide. This pigment is free from the liability to turn brown or crystallize in white paint. But it is not as quite a white. It is a very pure yellow pigment and has been in almost use in coming rapidly into use.

First Church of Christ Scientist.

Among the many beautiful examples of ecclesiastical architecture in California, probably the most striking is the First Church of Christ Scientist in San Francisco, of which Mr. Edgar A. Mathews is the architect. Into this building the architect has put his best efforts and the result as it stands today is worthy of considerable notice. To the layman as well as the professional, the color scheme of this church has a peculiar attraction, combining, as it does, the bright, cheerful colors of Spring with the soft warm browns and dull reds of Autumn. The delicate terra cotta ornament is concentrated where it blends most harmoniously on the main facades, while the graceful lines and proportions of the building as a whole are a perpetual delight to the eye. Often as one may see and examine it, it is of that kind of art which does not satiate, but ever reveals some fresh beauty in line.

Viewing the building from the outside, one is attracted first of all to the main brick walls of varying shades of warm gray, yellow, golden brown, etc., with introduction here and there of a red or dark chocolate brown header. The trimmings are of matt glazed terra cotta where a temperate use has been made of polychrome in the cornice directly under the projecting eaves to the gables and in the upper part of tower. In the large auditorium window upon one side, the rose window in front and the inner portion of front entrances, a restrained use of color has also been made. The brick directly under the terra cotta gable cornice is a warm gray color with small arches over the corbels of a soft dull yellow shade.

The roof, almost as much as the walls, attracts the eye at first glance with its gray green terra cotta tile; the wide projecting eaves to roof and brackets supporting same (which are of copper), giving those splendid lines to the building which count so much in the ensemble. Later this copper is to be touched up here and there with dull gold, greens, blues and reds while the soffit panels between projecting rafters are to have a dull gold background. The main portion of copper, however, will be left to weather stain. The front entrance steps are of white marble with panels of brick as a pleasing contrast in the platforms. Side entrance steps to Sunday school room, also walks of brick, form a fitting approach to the building. As a final touch, the color scheme of the exterior has been enriched by bronze fences and gates, bronze lamps and bronze doors to the entrances.

When one steps inside the church a quiet, restful, peace-loving atmosphere radiates round him—a blending of colors, the diffusion of light, a harmony of line, the exquisite detail—all tends toward the delicate beauty of the interior. On the painted and sanded walls is a golden hue—the organ screen and low wainscoting trim harmonizing in a light warm gray. The platform furniture likewise, and the pews are in grayed oak. A soft shade of tan in the carpets gives a fitting contrast to these. In the windows is glass of a dull "rippled" quality which produces a warm golden glow throughout the interior and gives a very slight touch of green to the gray oak woodwork.

Beneath the gallery a wainscoted partition of similar gray oak, enhanced by delicate hand-carved ornament, has the effect of a wooden screen constructed across the full width of the building. A similar wainscoting is to be found in the vestibule; the floor being of "Rookwood" tile in a tan shade with patterns of cream colored marble. Between the vestibule and the auditorium the doors are covered with tan leather. Another unique feature is the perforated organ screen made of composition material, strengthened by wire which is worked throughout—this open work allows sound from the organ to be transmitted through. No better acoustics in a church can be found than those in this one—they are exceedingly good. Probably the most noteworthy achievement of the architect in working out these plans was the way in which he solved the lighting problem. The lighting is direct diffused with "Alba" glass and this helps to make what is undoubtedly one of the best lighted auditoriums in the West.

Seats in the Sunday school room are to be settles eight feet long, every other one having a reversible back. The alternate rows only will be fastened to the floor so that one row can be pushed back to the next stationary row, and back reversed, thus providing space for small classes. Of special interest is the symbolical use of the vine—St. John 15. "I am the vine, ye are the branches, etc."—one sees in the bronze gates, main entrance doors, in the pulpit (more properly called "reader's desk" among Christian Science Churches) and chair; around arch to platform, around the two large auditorium windows, in the large columns or interior piers, supporting roof, etc., etc.—it is most fittingly and beautifully worked in.

Having viewed the exterior and interior both, instinct registers the lasting impression, one of refinement in line and detail, exquisite blending of the tones and colors, and above all a bright optimistic atmosphere radiates from the building—an impression delightfully refreshing coming as it does from a church set in the midst of rather somber surroundings, and one of which the architect may be justly proud.

Finally, it is a distinct and beautiful acquisition to the architecture of the community.

Production of Slate in the United States

According to the United States Geological Survey, in an advance chapter on slate, the production of that material in the United States in 1912 was valued at $6,043,318 which was an increase over 1911 of $315,-299. Of the amount produced $4,636,185 represented roofing slates, a production of 1,197,288 squares.

The roofing slate industry has shown a general advance since the first report of the Geological Survey in 1879, when the number of squares produced was 367,-857, valued at $1,231,221. The record production was in 1902 when 1,435,468 squares were produced and the greatest value was in 1903 when it amounted to $5,345,-078.

In 1912 there were produced 2,898,742 square feet of blackboard material and 4,482,571 school slates.

Probably one of the most important economical devices in the slate trade is the machine for splitting the slate. As now produced the making of roofing slate is nearly all done by hand by a dressing gang of three men—a block maker, a splitter and a dresser. The mechanical device does away with the dressing gang and makes the slates, it is claimed, more rapidly, more perfectly and more economically.

Objection to the use of the mechanical slate splitter has been made on the ground that some of the slates are full of ribbons and other defects which would break up the slate under the machine. The ribbons and defects, however, are not a condition of all slate and the defective slates would break under hand-splitting as well as under the machine.

Another point in favor of the splitting machine is that it will split blocks which have become somewhat dry through the loss of their quarry water on continued exposure to the air. It is almost impossible to work up slate of this character by hand and it has hitherto always found a place on the dump.

First Church of Christ Scientist, San Francisco, Cal
Mr. Edgar A. Mathews, Architect

Sab. Education.
[illegible] Church of Christ, Scientist, San Francisco, Cal.
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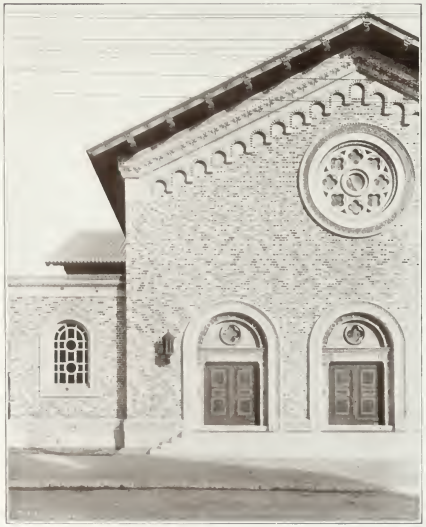
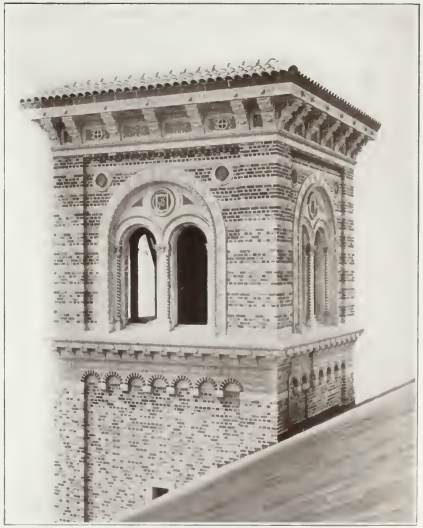
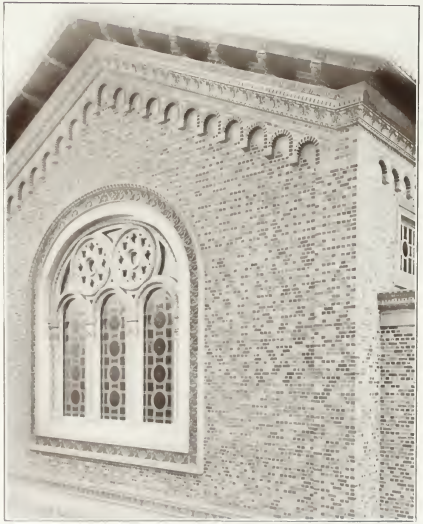


Detail Front Gable



Detail of Tower

First Church of Christ Scientist, San Francisco, Cal.
Alex. Jaggar & Mathews, Architects



Detail Side Gable

One of Four Entrances

First Church of Christ Scientist, San Francisco, Cal.
Mr. Edgar A. Mathews, Architect

Detail Brown Gate

Main Vestibule

First Church of Christ Scientist, San Francisco, Cal.

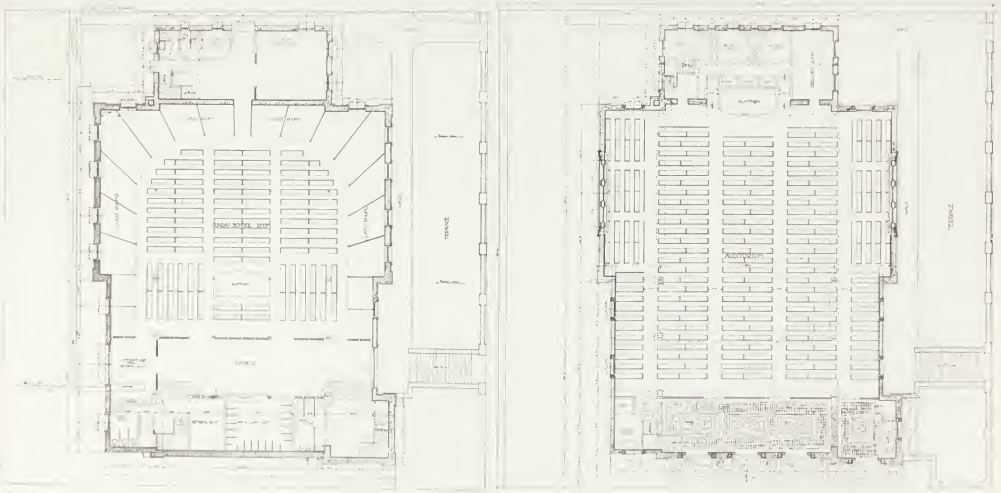
[illegible]

Interior.
First Church of Christ Scientist, San Francisco, Cal.
Mr. Edgar A. Mathews, Architect.

Organ Screen

First Church of Christ Scientist, San Francisco, Cal.

Interior,
First Church of Christ Scientist, San Francisco, Cal.



Floor Plans,
First Church of Christ Scientist, San Francisco, Cal
Mr. Edgar A. Mathews, Architect.

House Foundations

By Arthur C. Clausen.

The foundation, while the least seen of any part of the house, is a very important part of its construction. If the foundation should prove inadequate as to the size or quality of the materials of which it is made, allowing the building to settle, very bad effects result, and these are usually irreparable, except at great expense. There are well defined rules for figuring out the size of the foundation and the footing under it in proportion to the kind of soil on which the foundation rests and the weight of the building upon it.

The first thing to consider when determining the thickness of the walls or size of the footings is the kind of soil on which the footings are to be built. Bedrock is, of course, the very best kind of a foundation, but is seldom found near enough to the surface to be considered. Next to this sand and gravel in its native bed provides the best soil on which to build footings.

In excavating care should be taken that more sand is not removed than is needed, making it necessary to fill in under the foundation afterward with loose sand or gravel, for it is almost impossible, even with careful tamping and soaking with water, to pack down sand and gravel to as hard a bed as the native bed before it was disturbed.

While footings are not always put under walls for residence construction, the expense is so little that there is little reason for omitting them, and it is better to include them and be on the safe side. The footings for a frame residence need not be over twenty-four inches wide, or thirty inches for a two-story brick house. The thickness of the foundation wall varies according to the material of which it is made and the weight upon it. When the foundation is on clay care must be taken in a cold climate that the foundation walls go down below the frost, for if the frost gets under the footings, either during construction or after the house is built, there is no power on earth that will keep the clay from heaving the walls.

For this reason it is a good policy, when the building on top is light in weight, to excavate away from the building about two feet around the house and fill in with sand or gravel. With a full two-story house on top of the foundation or a brick house, this precaution is not necessary, the weight of the building holding the walls firmly in place and preventing the heaving of the clay against them from moving the walls. Sometimes clay is found to be porous, containing a large quantity of water. When this is the case the footings should be very much wider than under other conditions, the width depending upon the exact conditions found. The only way to build a foundation in a marshy place or on quicksand is to drive piles through it on to solid ground, make a reinforced concrete girder across the top of them, and then start the foundation.

Footings are nearly always made of concrete, since they can be made cheaper of this material than any other, and being in one continuous line, serve the purpose better than broken pieces of stone. The foundation walls are usually of concrete, stone or brick. If of concrete, the walls should be solid, and the cheapest way to build it is to pour the material into wooden forms. The studding and boards used in these forms can afterwards be used in the construction of the building. While eight-inch walls are sometimes used for foundations of bungalows, it is advisable to make them at least ten inches in thickness. For a two story house twelve inches, and for solid brick or brick veneered houses sixteen inches, the same dimensions applying to brick foundations. Stone foundations are a little more expensive than concrete foundations in most locations.

Where stone is immediately available and gravel is scarce, stone foundations, under these circumstances, would cost less. If the stone comes from the quarries in regular courses it makes the best wall. Such a wall can be made sixteen inches thick. If the wall is of rubble stone, or small, irregular, broken pieces of stone, the wall should be at least eighteen inches. In either case, cement mortar should be used, and the wall plastered with cement mortar on the outside when complete. When foundation walls are made of brick they also should be laid up in cement mortar, with a good coat of cement on the outside, and only good brick should be used.

The facing above the grade is an important factor in the appearance of the house. What the face should be should be determined in connection with the materials used for the balance of the house and its colors. Cement blocks are sometimes used above the grade in imitation of stone, although they should never be used below the grade unless they are filled up solid. Cement blocks, of course, do not give a correct imitation of stone, and should not be used with this intention. Concrete walls are sometimes used with a facing above grade of brick or stone veneer, the veneer being four inches thick, backed up with concrete to make the proper thickness of the walls.

Porch foundation should extend at least two and better three feet below grade in very cold climates in order to get below the frost. In any event the foundation for both main house or porch should be below the black dirt. When foundations are put on black dirt, the wall will settle.

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New Armory Plans Will Be Prepared

That the Dominion Government intends losing no time in connection with the provision of the new armories for the Vancouver militia was shown when the firm of Perry & Fowler, Pacific Block, received instructions from the Department of Public Works, Ottawa, to proceed at once with the preparations of plans for the drill hall structure to be erected on the site recently purchased in Grandview for $250,000 from Alderman McSpadden.

The instructions as received cover details providing accommodation for the Sixth Regiment, eight companies the Eighteenth Field Ambulance and the Nineteenth Company, Canadian Army Service Corps, with an approximated cost of $300,000. The work will be commenced at once and the architects expect to have it well under way in a short time.

The proposed new armories will have at least three exits, there will be armories and recreation rooms for each company and there will be mess rooms for each regiment. It is also probable that there will be miniature rifle ranges provided in the basement. The exact dimensions of the building and its interior arrangements will not be decided on until after a survey of the grounds and discussion with the commanders of the different military units.

Mr. Perry is an officer in the Army Service Corps and now on duty at Nanaimo. He is a member of the Society of Architects of London, Eng., and also of the Vancouver Society. Mr. Fowler is on the retired list, having had 28 years of service, retiring as Major of the Third Welsh Regiment. He received the Victoria Decoration, Long Service Medal and St. George's Cross. He is a Fellow of the Royal Institute of British Architects and a member of the local society.

Illumination for 1915 Fair to Be the Most Wonderful Ever Attempted

The illumination of the Panama-Pacific International Exposition will mark an epoch in the development of a rapidly progressing science. The effect of the illumination will be most striking.

When the evening falls myriads of lights will scintillate upon the exposition grounds, a thousand beams will flash from tower to tower.

As the visitor enters the exposition grounds after sunset he will seem to be walking in fairyland. Tens of thousands of cut-glass reflecting prisms, termed jewels, will be set in the great triumphal arch at the south entrance of the Court of the Sun and Stars. The huge tower surmounting this, lying directly before the visitor who comes through the main exposition gates, will be one of the most brilliantly illuminated features upon the grounds.

The jewels will reflect the light from searchlights placed upon the roofs of the exhibit palaces and will radiate the diffused light throughout the exposition grounds; they will hurl back the shafts of colored lights from batteries of searchlights moored in the harbor before the esplanade. They will shine and sparkle like a diadem of garnets, rubies, diamonds, emeralds and sapphires. They will be reflected in the crystal fountains, from which also shafts of iridescent light will pierce the falling streams, splashing in the mirrored lagoons like showers of flame from silvered anvils.

The distinguishing feature of the illumination will be that at night there will be no dark shadows; perfect reflections of whole buildings, with all the details of their facades, will be seen in the lagoons upon the grounds. Many millions of candle power will be utilized upon the grounds, and the chief zone of illumination will extend to a height of 125 feet, with a variation of but 5 per cent in the intensity of the light throughout this height. The result will be to bathe the Exposition in a great flood of light, not as brilliant as daylight, but presenting the effect of daylight.

There will be four principal sources of light upon the Exposition grounds, and the maximum of light efficiency will be obtained with the minimum of service and expenditure. These sources are: Illuminated arc standards, which will reflect light against the walls of the palaces and buildings, illuminated fountains in the great interior courts; concealed lights to be set within the columns of the encircling colonnades and within the arcades of the towers, and the lighting in the exhibit palaces.

In addition to these four principal sources of light, there will be two auxiliary sources. Upon the roofs of the exhibit palaces will be massed batteries of searchlights, while upon a pontoon, set out some distance from the harbor's edge, will be thirty-six 24-inch searchlights. The batteries upon the roofs of the exhibit palaces will not be visible, nor will their rays be seen passing through the general zone of the illumination, but their shafts of light falling upon thousands of quivering prisms suspended on the towers and turrets of the palaces will be reflected in all the colors of the rainbow. So perfectly and with such delicacy are these reflectors hung that the slightest wind will shake them. As the light strikes the different prisms color after color will be reflected. Encircling the great central court, the Court of the Sun and Stars, will be a colonnade crowned by hovering female figures symbolic of the stars. Each of these figures will support a star-like emblem, which at night will glitter with reflected light, but by day these stars will not be luminous.

The effect of the batteries of scintilators in the harbor will be marvelous. The batteries will go through evolutions of color, forming auroras in the sky and over the Exposition. On clear nights the shafts of light will be visible for forty or fifty miles. At night the visiting fleets will be brilliantly illuminated, and this will add to the superb illumination of the Exposition city itself.

The illuminated arc standards set throughout the grounds will reflect light upon the walls of the palaces and towers. The larger standards will be 55 feet in height and furnish from eight to ten thousand candlepower. Ornamental banners of canvas 8 feet across, and both rain and dust proof, will shade the lights and reflect a soft glow against the walls of the exhibit palaces.

The illuminated fountains in the great court of the Sun and Stars will present a phase of illumination entirely new, as far as Expositions are concerned. From the center of each of two fountains in the court will arise huge columns of dense white glass 70 feet in height and containing lamps of great candle power; from these fountains will issue a white but softly diffused light, which will penetrate to the furthest recess of the court.

The illumination of the facades and mural paintings will be attained by means of concealed lights placed in the backs of the columns of the colonnades. These, to a wonderful degree, will enhance the effect of the mural paintings, the execution of which is in the hands of a number of America's foremost artists. There will be no dark shadows behind the colonnades, except where a purplish shadow is artificially cast into the light for effect.

The lighting in the exhibit palaces will be carried out with the same degree of perfection. Dark shadows will never fall from the rafters of the buildings, as all the light will be reflected. Great ornamented chandeliers, 16 feet in diameter, will be suspended from the roofs of the exhibit palaces. These will necessarily give out direct light, but it will be soft and diffused, since the chandeliers correspond in principle to huge magic lanterns. At night lights shining through the windows of the exhibit palaces will make these great buildings seem full of life.

In its entirety, the illumination will present to night visitors the splendors of the architecture, sculpture, mural paintings and land-scaping, so that each phase of the Exposition will lose none of the attractiveness of the daylight presentation. It is proposed to render the spectacle such a one as no man has ever before beheld, and throughout this gleaming fairyland there will be nothing bizarre or garish. The lighting will be as artistic as the painting, architecture, sculpture or landscaping.

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Notice to Architects

The Board of Supervisors of Kern county will receive plans and specifications up to 10 a. m. of October 7, 1913, for an absolute fireproof jail building to be erected at Bakersfield for Kern county. The building is to cost $150,000. Plans must be submitted in conformity with the "Official Notice to Architects." The building is to be a two-story and basement structure and the site is 264 feet square. Plans, elevations and sections must be drawn to the scale of 8 feet to 1 inch and be executed in black and white only. A perspective may be submitted. Specifications must be completed, including plumbing, heating and ventilating. Second and third prizes in the sum of $250 and $125, respectively, are offered to the competing architects. Further information will be found in the Official Notice to Architects.

Conveniences of Modern Kitchens

Ten years ago household equipment usually simply "happened." Men were engaged in perfecting farm and factory machinery, and systematizing the world's industries, and hadn't yet gotten around to providing suitable appliances for the little domestic "factory" which every housewife has running at home.

Nowadays the men who make things have turned their attention to providing the home and especially the kitchen with as efficient labor and time saving appliances and tools as an up-to-date factory can boast. The modern kitchen can be a thing of beauty and a joy even to the woman who works in it, so great have been the improvements made.

Take for instance, the evolution of the fireless cook stove, a miracle working contrivance which banishes heat, steam, smells, and standing over the stove watching the slow tedious cooking process.

Lined with seamless aluminum, rust-proof, tarnish-proof, and durable utensils to use with it, and a cunning contrived steam valve attachment which allows the roasting of meats and fowls, the baking of bread and pies, as well as boiling and stewing. It is indeed a wonderful convenience.

All that is necessary is to heat the soapstone radiators either on a gas or electric stove and lay them in the fireless cook stove. Then the food, meats, vegetables, or whatever is to be cooked—cooks just as it is, and it is forgotten until the clock says it should be done.

It probably isn't known that every branch and variety of the cooking art can be successfully employed with the fireless cook stove.

Indeed such a great variety of either substantial meals, or light delicate dainties for high-teas, etc., are possible, and that a series of lessons and recipes in fireless cookery is supplied by one manufacturer of fireless cook stoves.

But after all the real reason for their existence lies in the fact that the newer stoves do really mean farewell to the old method of cooking.

The earlier models of these cookers showed a very cumbersome box that took up a lot of space in a small kitchen, but they have now been reduced to occupy waste space, and some of the later designs show them swinging on hinges under the kitchen table, where they may be pushed out of sight and out of the way while the rest of the meal is being prepared.

One of the best equipments in which a fireless cooker has appeared is the latest design of a kitchen cabinet with fireless cooker attached. These cabinets have a wonderful array of step-saving equipment, and are designed to hold an exceptionally large supply of spices, coffee, flour, canned goods and other foods which are used in the natural course of events in the preparation of meals, also a large cupboard for kitchen utensils that occupies a minimum amount of space.

Another innovation for kitchen efficiency is a porcelain topped kitchen table of white porcelain with rounded corners and edges, which is seamless, unbreakable and unchipable, and at once becomes a moulding board for pie baking, or meat board or bread board, for cooking and slicing.

This is far superior to the old wooden table tops which became the "catch all" for grease and other substances owing to the surface being scored from knife blades while preparing meals.

The best thing of all about a kitchen table of this kind is that it can be kept spotlessly clean—really hygienically clean—by wiping off with a hot wet cloth.

While these innovations are the most prominent improvements in kitchen efficiency that have appeared, a tour of inspection of any house-furnishing establishment will show a bewildering array of newly thought out tools and appliances, and many hundreds of little devices for the saving of time and effort.

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Terra Cotta Works Visited by S. F. A. C.

On Saturday afternoon, August 16, 1913, the members of the San Francisco Architectural Club and their friends paid a visit to the factory and pottery of Messrs. N. Clark & Sons in Alameda.

It is the desire of the club this year to visit a number of the works of large industrial concerns with a view to familiarizing its members with the processes of manufacture of the various materials connected and allied with the building trades. Knowing of this desire, Messrs. N. Clark & Sons extended invitations to the members to visit their works.

About 150 gentlemen accepted and were met at the Ferry Building by Mr. Gwynn, the firm's manager, who escorted the members across the bay to Alameda. A special Southern Pacific Company car was reserved for the club and thence run right into the works. Arrived there, the party was welcomed by Mr. A. V. Clark and Mr. Phillips, the works manager. Before inspecting the various departments connected with the making of architectural terra cotta and other clay products, the members were gathered together in the drafting department where an interesting lecture was given by Mr. Phillips and practical methods of the various stages of manufacture of architectural terra cotta were demonstrated by several of the employees of the firm.

Afterwards they dispersed for a couple of hours throughout the various buildings and viewed the plant and machinery.

The party was thereafter hospitably entertained by the firm. After spending a pleasant two and a half hours the company returned to the city.

Before leaving the works, the president of the club, Mr. Harry E. Nye, made a few appropriate remarks and extended to Messrs. N. Clark & Sons a hearty vote of thanks for the opportunity given to inspect the works and for the instructive and entertaining afternoon which everyone thoroughly enjoyed.

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Many Conveniences in Modern Homes

Adam Int-Hout, Chicago chemist, has a folding bungalow, 26 feet square, with a living porch 8x10 feet, and a wide entrance porch. It stands in the middle of a 50-foot lot. The house is divided into living room, kitchen, bathroom, downstairs bedroom and furnace closet. After a guest has been welcomed into the living room, the hostess excuses herself—there is no maid. The visitor notices the smirway next the entrance door and a balustrade forming book shelves running to the floor. Adjoining is a closet for outdoor wraps and an attractive grill extending from the floor to the ceiling in the middle of the long wall space that forms part of the back part of the living room. The hostess enters and hooks the kitchen door back. By touching the wall the hostess causes it to turn around into the kitchen, revealing on the side that turns in a hanging china cabinet and a mason-calming table all set. The table, with a light push, slides into the middle of the room. The last course comes from a shelf under the china cabinet. The table is set back in the kitchen by reversing the operation.

The house is heated by a school furnace set in the closet in the center of the house. There is a two-foot space back of the furnace between the kitchen and bathroom. Here are the gas meter, water meter, medicine chest for the bathroom and a chute built to answer for a stationary coal closet. It holds two tons and has the outside window high enough so that the coal may be thrown into it directly from the wagon. The slope is adjusted so the coal falls to the door of the chute, which is directly opposite the door of the furnace. All there is to do is to take out a shovelful as one would from a coal box.

A revolving dust pan is another feature of the furnace.

The kitchen has a stationary laundry tub of porcelain, the top of which forms the drip board of the sink. In the back wall is a kitchen cabinet, with drawers and swinging doors in the lower part and shelves with glass doors in the upper part. As this cabinet is built into the back wall it would curtail the light ordinarily. This is avoided by making both the front and the back of glass, an arrangement which not only lets the light through, but also cuts down the heat, as it is only necessary to open one of the small outside panes to make the cabinet into a cooler.

There is an upper room 15½ feet square, with north and south glass doors opening on sleeping porches, thus making it cool and totally unlike the ordinary attic room.

This folding bungalow cost about $2,000 and was completed in six weeks. The outside wall is of stucco set on a foundation of concrete.

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Concerning Sleeping Porches

"Of course you will have a sleeping porch."

That is a remark which one sometimes hears when mention of a new house is made.

And in many cases the builder is interested in this new idea.

The sleeping porch may be a fad, but it looks very much like a fixture. In some of the suburban communities there are houses specially designed to accommodate sleeping porches and those who live within are not by any means tubercular.

A sleeping porch is a provision for sleeping outdoors in summer at least, and not a few open-air devotees cling to their outdoor sleeping quarters throughout the twelve months; from January to December.

The simplest method of constructing a real sleeping porch in a new house of modest proportions is to construct a generous dormer in the roof on the sheltered side, leaving it entirely open at the front except to a point about two feet above the floor, to which height it should be boarded up. In this way a room of adequate size is formed, without drafts, and requiring only a curtain in front to secure privacy.

A good plan is to shingle the roof and sides and to lay a heavy grade of prepared canvas on the floor. This roofing and deck canvas is waterproof, so strong that it may be walked on freely, comes in widths of thirty and thirty-six inches, is lapped an inch and a half when it is put down, and it is fastened with tacks not more than an inch apart. It is best to give it a coat of paint at once and to keep it painted at intervals throughout the year. Make provision for draining off water which will surely be driven in when hard storms come.

The Modern Window.

Until recently windows have lagged behind in the march of progress. Nearly every feature in building construction has kept pace with modern demands excepting windows. We see exactly the same type of window in houses built yesterday as were used forty years ago.

No house can be properly ventilated with such type of windows. Poor ventilation has been a reproach to our civilization. The home builder has been waiting for a window that would give him and his household healthful ventilation regardless of weather conditions, and that would lift some of the burden of housekeeping off the shoulders of his women folks.

With employers' liability laws growing stricter each year, and with the cost of labor mounting higher, landlords are demanding a window that can be cleaned entirely from inside without danger of accidents—and cleaned quickly and easily.

The Architect has thus been very seriously handicapped in the treatment of his design by reason of the narrow limitations of the old style double hung and casement windows.

All this is now changed by the introduction on this market of the Simplex Window, which allows the architect the fullest scope in the treatment of window openings, there being absolutely no limit to the size of the opening, the number of sashes to the opening, nor the manner of treating the sashes as to their sizes, etc.

In addition to the fullest freedom and latitude allowed the designer in the treatment of his design the Simplex Window sash can be cleaned from inside of the room, eliminating all danger to the cleaner; and the work can be done in one-quarter the time required with the old style window. Thus owners and tenants are spared much expense in labor and all risk of employees falling from window ledges is done away with.

The sashes of the Simplex window can be easily adjusted to give perfect ventilation in any kind of weather.

They can be perfectly screened and shaded because in operating no part of the sash projects into the room. It is simple in construction and has no mechanism that can get out of order. It is weather and burglar proof.

The Simplex Windows do not use weights nor cords in their construction.

Although but little over a year old the Simplex Window is now specified and used by the leading architects of the coast, as will be noted by the following partial list of large buildings which are fully equipped with Simplex Windows: Standard Oil Bldg., Realty Rebuilding Co.'s Bldg., San Christiana Co.'s Bldg., Heald's Business College, Mackenzie Apts., Hogrefe Apts., Buckley Apts., Starr King School, Woodland High School, Beck Hotel, B. Leibes residence, N. B. Livermore residence, F. Suhr residence, 20 schools in Oakland, 2 schools in Richmond, 3 schools in Stockton, 60 portable schools, 20 schools scattered throughout the country.

This article would be too long if it were attempted to give even a partial list of small residences, flats, apartment houses and hotels using the Simplex Windows.

In brick and concrete buildings Simplex Windows cost no more than old style windows hung with weights and cords. It is the only modern, perfect window. Made in metal, also wood. Underwriters' label secured.

Architects should send for descriptive circulars, details, etc., from the company, whose offices are in the Underwood Building, 525 Market street, San Francisco.

In closing, a word as to the responsibility of the Simplex Window Company would not be out of order. Our readers are assured of the fact that this company is financed by men of wealth, power and influence, and that the Simplex Window Company is a permanent factor in the building world.

Appropriate Hardware

The selection of the finished hardware for a building is too frequently left to chance, the discretion of the contractor or the nondescript collection which may be found in the average hardware store. As a rule the owner of a fine building is anxious to secure something distinctive in the way of design for his house. He pays for special selected hardwood doors; he spends time, thought and money on the lighting fixtures; but too frequently he puts up with almost anything in the way of locks, escutcheons, knobs and other hardware which is just as prominent as the doors or windows. A little care in selection and a little time spent in ordering would have secured, at probably no greater expense, hardware which would have harmonized with the woodwork, fittings and other decorations and would have been a source of pride to the owner, contractor and architect.

The Italian Archaeological Mission has recently discovered at Cortina, in Crete, a temple to Egyptian divinities. In the interior of the cell in the building were found statues of Jupiter, Serapis, Isis, and Mercury, also fragments of a colossal statue of a woman and the bust of a woman. All are in marble. Several small terra cotta statues were also found, and a flight of steps leading to a subterranean pool where religious ceremonies of purification used to be celebrated. The Mission has found in the interior of the island a large number of hitherto unpublished epigraphic texts.

The Results of Co-Operation.

While the Pacific Coast Architect in this current issue has endeavored to illustrate the notable edifice of the First Church of Christ, Scientist, with a descriptive article, it is gratifying to us to mention an interview that we purposely obtained with N. Clark & Sons, the manufacturers of the architectural terra cotta face brick and glazed roofing tile, which are so dexterously used throughout the exterior of this building, our object being to know more of the co-operation which so manifested itself in this work.

Paradoxical as it may appear to many, we learned that the distinctiveness and success of this building lies in the fact that it was not carried out as per specifications. The work from start to finish was rather a whole hearted endeavor to follow the architect's details and drawings and to crystallize his feelings in clay.

It would be difficult to find a building anywhere in which so much pains were taken with the architectural trifles of the building, trifles which go to make perfection. Every little detail has a spirit and meaning all its own. Whether the ornamentation is taken separately or collectively, there is always harmony delicate yet clearly defined in its relationship to the brick. A glance at the work shows an artistic rendering of the clay worker's art from the street line to the roof ridge. The interesting features of the work lie not only in taking advantage of the plasticity of the materials involved to create proportionate lines and beautiful ornament, but also in mutely testifying to the spirit of the times and the expressing of the architect's feelings as was the custom of early architects.

Coming to the question of color. This is always an alluring attraction to all architects and designers. Perhaps the happiest feature is the restraint here shown. There has been no venturing but rather a yielding to the interests of the building with splendid results.

Not only is the polychrome work beautiful in itself, but it revives the public interest in buildings. The attention of the man in the street is drawn and fixed and he feels that after all there is something more in building than piling up masses of brick and masonry. He learns that brick and terra cotta make beautiful building materials. The architect knows that they fulfill his highest requirements where combinations of distinctive or native colors are being sought. By native colors we mean the colors of the materials themselves apart from any definite color scheme obtained by the use of polychrome work. The perfection of the polychrome as here shown has attracted the attention of experts and the highest praise has been bestowed. Equal care was exercised in every department of the firm and the result is perfect terra cotta, straight, durable, uniform in color and artistic in form.

The firm was untiring in its efforts to please and such methods added to quality and promptness are the features that have made its reputation and secured for it a large place in the ever growing market for architectural terra cotta on the Pacific Coast and in the Western States.

Heating Dwellings by Electricity

The city of Seattle has recently made provision for heating dwelling houses by installing electric heating coils under the hot water boilers and individual radiators in the houses of those who order the service. The heaters are automatically controlled by a device which cuts off the current when the heat reaches the desired degree and turns it on again when the temperature falls below a certain degree. It is said that these heaters provide a satisfactory quantity of heat at a less cost than coal

Mohrlite Fixtures—and the Reason

When indirect illumination was first introduced, it fell short of the desired results because of the general conditions encountered. Unless the ceiling and side walls were of the proper light shades, the cost per candlepower was prohibitive; therefore indirect lighting was only possible under very favorable conditions.

With the Mohrlite system, any decorative color scheme may be carried out without any fear as to the amount of light absorbed, and, therefore, lessened illumination.

is harmful; on the contrary, it is less harmful and far less fatiguing than the irregular use of the eyes under changing lights.

Artificial light requires a much more careful use than the sunlight. The latter has been filtered through many miles of air before finding its way down to the earth's surface. In this filtering process many of the more harmful rays of light are removed. Until the advent of the Mohrlite, the rays of artificial light struck the eyes only a few feet from their source. The extreme rays which lie at either end of that scale which is best seen in the rainbow—the rays outside the red of the rainbow

Designed by Earle B. Curtz.

TOWNSEND CANDY STORE—RECENT INSTALLATION.

The scientific construction of the Mohrlite is the result of years of study and trials, under every imaginable condition, until today it makes its appearance, heralded as the "**perfect light,**" and one which will revolutionize artificial lighting. A light of efficiency, with absolute ocular comfort.

Since the introduction of electric lighting, the eyesight of the human race has deteriorated astoundingly. Thirty years ago, for a man to appear in public wearing glasses would subject him to remarks not pleasant, but today fully thirty per cent of the inhabitants of the civilized world wear them. These facts made us think, and the more we thought the more we realized that the present-day artificial lighting was to blame.

We turned to nature and studied her light, and found that the eyes were exposed to reduced intensities of very diffuse light. This, then, was the problem, How to apply these essential characteristics to artificial conditions of modern life. The result was Mohrlite.

A very large proportion of the "tired feeling" so pronounced in city life, and which differs widely from the weariness resulting from a day in the country, is due to the muscle strain in the eyes. It is a great mistake to suppose that the steady use of the eyes under proper light and the rays inside the blue (known as the infra-red and the ultra-violet)—are very injurious, and it is these that hurt our eyes in direct artificial lighting.

Too strong a glare does not increase brilliancy, but lessens it. If an illumination be too bright, it cannot be seen at all, as, for instance, looking at the sun, there is a certain pitch beyond which light not only ceases to be real illumination, but in which it defeats its own purpose by tiring the optic nerve. The best lighting is that which produces the utmost clearness without straining the sight, and this can only be obtained through reflected light when the source of reflected light is hung high out of the range of vision.

The Mohrlite is installed high, well out of the field of vision; its reflecting surface is constructed so as to spread the light evenly throughout, except that a greater intensity is downward. Under this method the light emitted is in such a direction that it cannot directly enter the eye.

The Mohrlite can be made to serve any and all conditions, and the design of the fixture can be carried out to suit the taste of the most fastidious. It is the only lighting fixture in which the architect or builder can carry out his interior decorations.

With the coming of the Mohrlite, the problem of correct lighting of art galleries has been solved. It is impossible to describe in print what a beautiful light it gives for this very purpose; the evenness of the light is such that paintings are seen in their true value, from any point of view. And last, but not least, the Mohrlite glow is the one and only reflecting compound to which an original color can be given. With various colors (or in combination) many hued lighting effects, mingled in perfect unison (like the rainbow) can be accomplished with this glow.

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Triumph for Tin Roofing

St. Ignatius Church, San Francisco, was covered with 300 boxes of 14x20 Target and Arrow roofing tin manufactured by N. & G. Taylor Company, Philadelphia. The selection of good tin for roofing this handsome church edifice, the finest of its kind west of the Rockies, is one more proof of the high reputation their tin enjoys.

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Personals

Architect Alexander Doctor of Vancouver, B. C., was a recent visitor in San Francisco.

Alfred Kuhn, with Loring P. Rixford, has returned from an extended vacation spent in the East.

Architect H. M. Bamfield, Pasadena, Cal., has moved his office to room 311 Kendall Building.

Thomas Schultz, formerly of Chicago, is now associated with Thomas & Schneider, art glass manufacturers, 607 Howard street.

Architect V. J. Moe has opened an office over the Folly Theatre, Eugene, Oregon. Mr. Moe was formerly located in Chicago.

Architect R. E. Borhek, with offices in the Savage Schofield Building, Tacoma, Wash., has returned from a vacation spent in the mountains adjacent to Tacoma.

Atholl McBean, Secretary of Gladding, McBean & Co., has returned from a four weeks' motoring trip through Northern California.

E. J. Baum, for the past year with Architect W. W. Beaworth, New York City, is a visitor in San Francisco.

J. W. Hooker, with the Thomas Day Company, has returned, after spending a two weeks' vacation at Guerneville.

Architect Frederick Herdon has moved his office from San Francisco to room 517 Lissner Building, Los Angeles.

Architect A. M. Edelman, Los Angeles, has returned from a three weeks' vacation spent at Santa Barbara, San Francisco and Lake Tahoe.

Architect S. Tilden Norton, Los Angeles, has returned from a trip to Seattle, Vancouver, Skagway and other Northwestern cities.

Architect W. J. Whiteway, Vancouver, B. C., has moved his office from the Molson Bank Building to the World Building.

Allen Strowd Company, Limited, Vancouver, B. C., have moved their office from the Welton Building to the Lee Block.

Architects Sharp & Thompson, Vancouver, B. C., have moved their office from 536 Hastings street to 301 London Building.

Carl O. Andresen, in the paint and color department of W. P. Fuller & Co., has returned from a two weeks' vacation spent at Hilton.

R. J. Davis, president of the Van Emon Elevator Company, San Francisco, was a recent visitor to Portland, Ore., on business.

K. G. Lundstrom, for many years located in Portland, Oregon, in the general contracting business, is now located at 542 Seventh avenue, San Francisco.

Architect S. A. Johnson, formerly of Fresno, Cal., expects soon to open an office in San Francisco.

Architect Charles I. Rousseau has moved his office from the Phelan Building to the Maskey Building, 46 Kearny street.

Architects Fabre & Bearwald have moved their office from 903 Merchants' National Bank Building to 1303 and 1304, same building.

Architect Harvey Partridge Smith, 232 Blake block, Oakland, Cal., has returned from an extended trip east

The Van Emon Elevator Company, 48-56 Natoma street, have thoroughly remodelled and enlarged their office so they will be able to take care of their increasing business.

Architect V. L. Haley, formerly of Los Angeles, has bought an interest in the Peerless Manufacturing Company, San Francisco manufacturers of cement laundry trays.

George P. Eisman has purchased Mr. Cook's interests in the Van Waters-Cook Manufacturing Company, Portland, Oregon, manufacturers of the Hester System of store front construction, which is strictly a coast product.

N. Clark & Sons, 116 Natoma street, will furnish the Matt Glaze Terra Cotta for the Warrington and Belle Gravia Apartments, Frederick H. Meyer, architect, and the face brick for the new Polytechnic High School.

N. A. Scharren, head of the Scharren Blair Company, Portland, Oregon, marble and granite manufacturers, has returned from a tour of Germany, his native country, which he had not seen for many years.

S. B. Cooke, 422 Failing Building, Portland, Oregon, has the agency for the United States and Canada for the Universal Bed Company, which manufactures in Portland a disappearing bed, under patents of F. J. Crouch.

Architect E. F. Young, with offices at 251 Kearny street, has returned from spending a month's vacation at his country home in Redwood Canyon.

Charles W. Heath, the general representative for the J. D. Fredrain Manufacturing Company of Portland, Oregon, was a recent visitor in San Francisco. Mr. Heath is touring California in his "Pierce Arrow."

The Western Asbestos Magnesia Company, 25 South Park street, has received an order from the U. S. Government for 25,000 square feet of Carey's magnesia flexible cement roofing to cover the mess and drill hall at Angel Island.

Thomas & Scheider, 607 Howard street, have received the contract to furnish the art glass windows for the First Methodist Episcopal Church at Palo Alto. W. H. Weeks architect, and Saint Stanislaus Catholic Church at Modesto, John J. Foley architect.

N. Clark & Son, 116 Natoma street, have closed the contract to furnish the Matt glazed terra cotta for the new Pittock Block at Portland, Oregon, Doyle & Patterson architects. The extent of this contract approximately is 25 car loads.

The architectural firm of Miller & de Colmesnil has been dissolved and in the future each of the former partners will handle their personal business separately. Mr. Miller and Mr. de Colmesnil will continue to occupy the same offices in the Lick Building.

J. A. Drummond, 725 Chronicle Building, Pacific Coast representative for the N. & G. Taylor Co., Philadelphia, Pa., is on an extended eastern trip. While away Mr. Drummond will call at the home office and will also visit their recently enlarged plant at Cumberland, Md.

The Interior Metal Manufacturing Company of Jamestown, N. Y., have opened offices at 205 Examiner Building, San Francisco, with C. Edward Ross in charge. This firm manufactures Hollow fireproof steel doors, windows and trim bronze entrance doors and bank fixtures.

D. G. Craig, coast sales manager for the Beaver Company's manufactures of Beaver Board, Buffalo, N. Y., was a recent visitor with their local representatives, Lilley & Thurston Co. Mr. Craig reports that his company have purchased ground at Edmonds, Wash., and are making arrangements for the erection of a factory in the near future.

Gould & Champney, formerly associated but now conducting separate offices in the practice of architecture, Seattle, have won their long drawnout suit against R. C. McCormick for services rendered on the New Richmond Hotel, Seattle. The Supreme Court affirmed the decision of the lower court awarding the architects $7,239. The courts find that the architects were dismissed without due cause.

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CALIFORNIA.

Apartment House—San Francisco. Architects Dunn & Kearns, Monadnock Building, have prepared plans for a three-story and basement frame apartment house for M. Byrne. The building will be erected on Webster street, near Pacific, and will cost $40,000.

Apartment House—San Francisco. Architects Falch & Knoll, Hearst Building, have prepared plans for a three-story frame apartment building to be erected on Page street, near Fillmore, for William Hencke, to cost $15,000.

Apartment House—Los Angeles. Architects M. S. Tager & Co., Trust and Savings Building, have prepared plans for a four-story brick and steel apartment house building for C. C. Hooper. The building will be 52x150 feet and will have 110 rooms arranged in two and three room suites.

Apartment House—Los Angeles. Architect L. L. Jones, I. W. Hellman Building, has prepared plans for a three-story brick apartment house to cost $30,000 for J. P. Partch.

Bank Building—Riverbank. Architect C. H. Russell, Humboldt Bank Building, San Francisco, has prepared plans for a two-story brick and steel bank building to cost $40,000 for the Riverbank Land Company.

Exhibit Building—San Francisco. Architects Reghetti & Headman, Phelan Building, have been commissioned to prepare plans for a large building which will be erected on the Exhibition Section of the Panama-Pacific International Exhibition for the Swiss Society. The building will cost about $100,000.

Bungalow—Berkeley. Architect John Hudson Thomas, First National Bank Building, has prepared plans for a modern one and one-half story bungalow for O. I. Pummels.

Hotel Building—San Francisco. Architect C. A. Meussdorffer, Humboldt Bank Building, has prepared plans for a five-story and basement reinforced concrete building which is to be erected for Col. Fallon on the south side of Market street, near Brady.

Packing House—San Francisco. Architect Smith O'Brien, Humboldt Bank Building, has completed working drawings for a three story and basement reinforced concrete building, to be erected for the Workman Packing Company on Harrison street, near Fourth, to cost $50,000.

Residence—Architect O'Brien & Werner, Foxcroft Building, are preparing plans for a two-story and basement frame and brick residence to be erected for Abbot A. Hanks on Pacific avenue, near Laurel. When completed the house will cost about $12,000.

Store and Hotel Building—San Francisco. Architect Arthur T. Ehrenpfort, 251 Kearny street, has prepared plans for a four-story and basement store and hotel building which is to be erected at the corner of Olive and Larkin streets.

Theatre Building—Kansas City, Mo. Architect G. Albert Lansberg, 709 Mission street, San Francisco, has just completed working drawings for a Class A theatre building, which will be erected for the Orpheum Circuit at a cost of $350,000.

Residence—San Francisco. Architect W. H. Radcliff, Jr., First National Bank Building, Berkeley, has prepared plans for the construction of a two-story and basement frame residence to be erected in St. Francis Wood for A. S. Cunningham, to cost $5,000.

Hotel Addition—San Francisco. Architect C. H. Skidmore, Foxcroft Building, has prepared plans for a four-story and basement reinforced concrete addition to the Niagara Hotel, situated on the south side of Howard street. Estimated cost of addition is $20,000.

Apartment House—San Francisco. Architect Frank S. Holland, 100 Haight street, has prepared plans for a three-story and basement frame apartment house to be erected on Fillmore street, near Hayes. Cost $17,000.

Hotel Building—San Francisco. Architect Kenneth MacDonald, Holbrook Building, is preparing plans for an eight story and basement brick and steel hotel building, which will be erected for Reuben Lloyd on Sutter street, west of Taylor. Building will cost, when completed, $50,000.

Apartment House—San Francisco. Architects Ross & Burgren, 310 California street, have prepared plans for a four-story and basement reinforced concrete apartment house, which is to be erected on Post street, near Larkin, for S. Zusman, to cost $30,000.

Apartment House—San Francisco. Architect G. Scholz, Phelan Building, has prepared plans for a three-story and basement frame apartment house to be erected on Fulton street, near Gough, for F. Mertens, to cost $10,000.

Apartment House—San Francisco. Architects McDougall Bros., Russ Building, have prepared plans for a three-story and basement frame apartment house to be erected on California street, near Broadway, for W. F. Roberts. When completed the building will cost $20,000.

Hotel and Store Building—San Francisco. Architects Faber & Bearwald, Merchants' National Bank Building, have completed plans for a five-story and basement steel and reinforced concrete hotel and store building to be erected for Mr. Vayssie, the building to cost about $80,000

Hotel—San Francisco. Architects MacDonald & MacDonald, Holbrook Building, has been commissioned to prepare plans for a large addition to the Union Square Hotel on Post and Stockton streets, construction will be of reinforced concrete and cost about $150,000.

Theatre and Stores—San Francisco. Architects Rousseau & Rousseau, Monadnock Building, have completed plans for a Class A theatre and store building to be erected on Broadway, west of Grant avenue, for Nellie Harris, to cost $40,000.

Passenger Station—The Architectural Department of the Southern Pacific Company, Flood Building, are preparing plans for a new passenger station at Richmond, Cal., to cost about $30,000.

Office Building—Oakland. Architect C. N. Burrell, Albany Building, Oakland, has finished plans for a nine-story Class A building to be erected by Morris & Muller at the corner of Fourteenth and Jefferson streets. Estimated cost of building $150,000.

Residence—Stockton. Architect Ralph P. Morrell, Odd Fellows' Building, has prepared plans for a two-story and basement frame residence for Miss D. MacInnes, to cost $4,000.

Apartment House—Oakland. Architect Chas. W. McCall, Central Bank Building, has completed plans for a six-story apartment house to be erected on the corner of Twelfth and Grove streets.

Store and Offices—Oakland. Architect C. W. Dickey, Central Bank Building, has prepared plans for the remodelling of the store building on the corner of Thirteenth and Clay streets. The remodelling will cost $28,000.

Residence—Piedmont. Architect A. D. Nicholsen, Whittell Building, San Francisco, has prepared plans for a modern residence to cost $6,500 for W. D. Tillinghast.

Theatre Building—Los Angeles. Architects Austin & Pannell, Wright & Callander Building, are preparing plans for a one-story and basement brick and steel building to cost $35,000 for H. L. McAllister and J. M. Dobbins.

Theatre Building—Stockton. Architect Walter King, Elks' Building, Stockton, has prepared plans for the 1-story and brick construction theatre building for J. A. Stock.

Residence—Los Angeles. Architects Hibbs & Bunn, 701 Loeser Building, have prepared plans for a two-story and basement frame residence and garage to be erected in Glendale on H. P. Woodhill.

Residence—Los Angeles. Architect Frederick Hamilton, 517 Lissner Building, is preparing plans for a two and three-story reinforced concrete residence to be erected at Oak Knoll for Baroness Rose Von Zimmerman, 223 South Rampart Boulevard.

Residence—Los Angeles. Architect Charles E. Shattuck, 418 Union Building, has prepared plans for a two-story brick and frame residence to be erected on West Adams Place for Miss Alice A. Dryden, to cost about $25,000.

Residence—Los Angeles. Architects Eager & Eager, Story Building, have prepared plans for a two-story brick and frame residence to be erected on the west side of Holmes Boulevard, near Sixth street, for J. G. Warren to cost about $25,000.

Bank and Office Building—Pasadena. Architects Parkinson & Bergstrom, 1025 Security Building, Los Angeles, are completing plans for a One Story reinforced concrete office building to be erected on the corner of Colorado street and Marengo Avenue, Pasadena, for the Citizens' Savings Bank, to cost about $100,000.

School Building—Fresno. Architect Frederick H. Fley, Register Building, Los Angeles, is preparing plans for a two-story and brick basement grammar school building to be erected at Fresno. Cost estimated at $45,000.

Store and Office Building—Santa Ana. Architects Mitchell & Dupree, 43 American Avenue, Long Beach, have prepared plans for a four story and basement brick, stone and office building to be erected on the corner of Fourth and Sycamore streets for W. H. Spurgeon.

Church—Fresno. Architects Starbuck & Park, Forsyth Building, have been commissioned by the Directors of the First Mennonite Church or Reedley to prepare plans for a new church building to cost $5,000.

Remodeling—Fresno. Architect A. W. Cornelius, San Francisco, has prepared plans for the remodeling of the Tanner & Dankers Building on Mariposa street, a new front of pressed brick will be built with plate glass, marble and stone trimmings. Cost $15,000.

Store—San Francisco. Architects Wills, Polk & Co. Mercantile Exchange Building, will have plans and specifications completed for the steel and reinforced work on the new two-and-one story Hotaling Building soon. The bay office structure will be erected on the north side of Washington street, opposite Sansome.

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OREGON.

Warehouse—Portland. Architects Emil Schaidt & Son, Commonwealth Building, have prepared plans for the D. P. Thompson Estate for a 2 two-story and basement warehouse, 100x200 feet, to cost $60,000.

School Building—Myrtle Point. Architect Newton C. Gaige, Portland, has finished plans for a $12,000 frame school building.

Apartment House—Springfield. Local business people are considering the erection of a large apartment house on the corner near mines. Proposed construction will cover ground space of 100x100 feet.

Armory Addition—Portland. Architects Emil Schaidt & Son are preparing plans for a brick addition 85x85 feet to the Portland Gas & Coke Company's plant.

Armory—Roseburg. State Architect W. C. Knighton has plans prepared for the new Armory building to be constructed of reinforced concrete. The building will be 100x120 feet and cost $60,000.

Residence—Portland. Architect Earl A. Roberts, Selling Building, has prepared plans for a two-story frame residence for J. Bullivant to cost $4,500.

Bridge House—Portland. Architects Lawrence & Holford have prepared plans for a boiler house for the Bell Court apartments to cost $4,000.

Church Building—Portland. Architects R. L. Bailey and Abigail Bailey, have prepared plans for a stone church building to be erected on Rose City Park. The same architects have plans prepared for a brick building at Sandy, Oregon.

Bungalow—Eugene. Architect J. H. Lunt, Eugene, has prepared plans for eight bungalows for the Eagle Knife Company to be erected at Wendling, Oregon.

Car Building—Salem. Architect W. C. Knighton, Salem, has prepared plans for the Oregon Fruit Building to be erected at San Francisco.

Library—Hood River. Architects Sutton & Whitney, Davis Building, Portland, have prepared plans for a $15,000 Library building.

Convent Building—Portland. The Rev. Bern Young, of the Holy Redeemer Church, has returned from his visit to Europe and secured plans for eight buildings for the new convent to be built on the property recently purchased by the church on Alberta street. The buildings will be of brick and will be two stories high. The cost of the buildings will be $100,000. The plans were secured from Architect Hermann Brosamler & Hummel, Portland. The contractor will be Schaidt.

Store and Warehouse Building—Salem. Architect Frank Lyon, Ankeny Building, Portland, has been commissioned to prepare plans for a two-story building to be erected for R. F. Page. Salem to cost $12,000.

Residence—Medford. Architect Lewis Kristin, Write-Kay Building, Portland, has been commissioned to prepare plans for two suburban residences for R. E. Mortensen. Buildings will cost about $12,000.

Apartment House—Palermo. C. E. Huff has taken out a permit for the erection of a two-story apartment house on the corner of Miller street and Eleventh terrace. The building will cost $10,000.

School Building—College Grove. Architect Tourtellotte & Hummel, Kenton Bldg., Portland, have received the contract for the $40,000 school building to be erected at College Grove by W. O. Herkart, Eugene, Oregon.

Hotel Building—Portland. The Mercer State Hotel Corporation will have plans prepared and erect a five-story hotel building to cost $250,000. The building will be erected on the corner of Eleventh and Morrison streets.

Flats Building—Medford. Architect F. G. Clark has secured plans for a two-story frame structure for the Ford Flats.

School Building—Vernon. Architect Architect Tourtellotte & Hummel, Board of Trade Building, Portland, have prepared plans for a school building for the Episcopal Deaconess. Cost $15,000.

Church Building—La Grande. Architects Tourtellotte & Hummel, Kenkeldey Building, Portland, have prepared plans for a brick and stone church building 35x90 feet for the Catholic church at La Grande.

Residence—Architects Lawrence & Holford, Chamber of Commerce Building, Portland, have prepared plans for two large residences, the larger of the two to be erected at a cost of $35,000 and the smaller one to cost $15,000.

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WASHINGTON.

Cold Storage Plant—Seattle. Skatoles are now being prepared in the office of Paul F. Waltham, Chief Engineer for the Port of Seattle Commission, Central Building, for the construction of a million dollar cold storage warehouse for the East Waterway Terminal Project.

Nursing Home—Seattle. Architect C. J. Kilbride, 1932 Second avenue, has been commissioned to prepare plans for an eleven-story fireproof apartment house for E. C. McKelvy. The building will be 128x70 feet and cost about $600,000.

Warehouse—Seattle. Architect C. Saunders & Laurence, Alaska Building, are preparing plans for a seven-story concrete and brick warehouse for E. Harbaugh & Co., to cost about $125,000.

Hall Building—Seattle. Architects Cannon & Haynes, Metropolitan Building, have prepared plans for the construction of a two-story, 80x97 feet, fireproof hall building for The Dancing Academy, at a cost of about $20,000.

Residence—Seattle. Architect L. Gale Fox, Central Building, has prepared plans for a three-story residence for N. B. Week, 4740 Twenty-first avenue, northeast, to cost $18,000.

Storage Warehouse—Seattle. Carl O. A. Powell, Central Building, has prepared plans for the First Unit of a five-story reinforced concrete and terra cotta cold storage warehouse on the Central Waterfront improvement for the Port of Seattle Commission. The building will be 100x270 feet and cost about $300,000.

Theatre Building—Seattle. Architect W. A. Pridmore has prepared plans for a two-story, 60x111 feet, concrete and terra cotta moving picture theatre building for P. B. Haller on the east side of Twenty-seventh avenue between Yesler and Lenora streets, to cost $50,000.

Store Building—Tacoma. Architect Bullard & Hill, Provident Building, have prepared plans for a three-story brick and steel building for J. W. Bodley, 1107 street, near Thirteenth, to cost about $15,000.

Residence—Seattle. Architects Carter & McLaren, Spokane, have let the contract for the $50,000 residence of C. O. Simonds on the Country Club in the Highlands.

School Building—Seattle. Architect Edgar Blair, 309 Seattle avenue, has prepared plans for two four-room additions to Webster school building that will cost about $12,000.

Residence—Seattle. Architects Hyland & Conroy, Metropolitan Building, have prepared plans for a $40,000 residence and garage to be erected at Lake Forest Park for J. Ainsworth.

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BRITISH COLUMBIA.

Vancouver—Plans have been prepared by Architect J. M. Kenyon, of Victoria, for the erection of the Inter-Mill Building, 300x150 on Carrall, Hastings and Cordova streets.

Theatre Building—Victoria. Architect Jones & Woodrow, Union Building, has prepared plans for a moving picture building to cost approximately $12,000.

Apartment House—Victoria. Architect C. E. Watkins has prepared plans for a $45,000 apartment house to be erected at Cook and Collison streets.

School Building—Vancouver. The Parish of the Holy Rosary will soon decide whether to go ahead with the $100,000 school building, plans prepared by Architects Tegan & Vezina.

Hotel Building—Victoria. Architects Coates & Fleet have prepared plans for a three-story hotel and store building to be erected at Duncan for E. Stock.

Museum—Victoria. Architect F. M. Rattenbury has prepared plans for the new Government Museum Building. The building will be a fireproof construction with stone exterior, 90x260 feet.

Bank—Vancouver. Architect E. S. Mitton, 413 Granville street, has prepared plans for the Japan Trust Company for the erection of the two-story reinforced concrete and brick building on Powell street.

Armory—Victoria. Architect W. Ridgeway Wilson has prepared plans for the Victoria Armory building that will be two stories and basement, 100x200 feet, to cost about $250,000.

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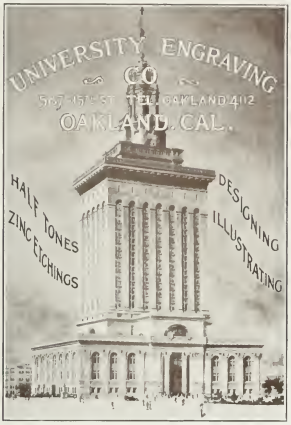

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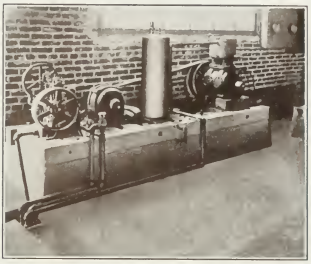

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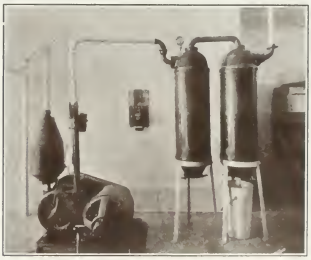

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SAN FRANCISCO
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VOLUME SIX
NUMBER ONE

OCTOBER, 1913

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The Pacific Coast Architect

VOLUME VI — SAN FRANCISCO, CALIFORNIA, OCTOBER, 1913 — NUMBER 1

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ADVERTISING RATES ON APPLICATION — TEL. DOUGLAS 3424

Current Comment

The idea of face brick for interior work is gaining ground right along and is branching out in several interesting directions.

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The brick porch idea has been making wonderful progress, and we not only see them now as a harmonious part of the brick home, but they are to be found fronting frame homes in many instances.

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The roof garden of a New York hotel has a glass roof over which flows a cascade of water, which, with a special light arrangement, produces the illusion of dining under water.

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Lime to Thaw Ground

A coating of unslaked lime was used to thaw out the frozen ground for an excavation operation in Iowa recently. The innovation was entirely successful.

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Cleaning and Painting the Capitol Dome

Cleaning the deposit of green from the statue of Freedom that surmounts the dome of the capitol at Washington, is a difficult job that is done once every three years. A large scaffold is erected for this purpose, and since there is no elevator, the material is all carried up by hand. In connection with this year's cleaning the entire dome of the capitol is being painted, a job that requires about a hundred men and ten weeks of time. The dome has about 132,000,000 square feet of surface, and it is estimated that 65 tons of paint, or 240,000 gallons, will be required for covering the space.

An Architect's Fees

In view of the many published statements about the large fee to be received by Guy Lowell, the architect of the new court house for New York, it is interesting to observe the element of uncertainty which attaches to the profit to be derived from an undertaking of this magnitude.

The cost to an architect of preparing his drawings and specifications and seeing that they are properly carried out, in offices run on the best business basis, is at least one-half of his commission, says the Philadelphia Ledger. This, however, applies only to the general class of buildings and not to residential or public and monumental work. The cost is then as high as 75 per cent of the architect's commission.

The United States government prepared a statement which was submitted in congress (senate document No. 916, 62nd congress, second session) which gave the average cost of preparing drawings and specifications alone, exclusive of superintendence or any other field expenses, for the years 1905 to 1911, inclusive, to be 4½ per cent. This was for preparing the drawings for the buildings erected by the United States government and done by the supervising architect of the treasury, a man known for his great executive ability, and, therefore, done with the greatest economy possible.

Reports have been submitted by the state architect of New York showing that the cost to the state for preparing the plans and specifications made in the state architect's offices exceeds 6 per cent. The cost to the New York Central railroad for preparing the plans for their new station has exceeded 6 per cent. Therefore an architect who is able to prepare the plans for a $10,000,000 building at a cost to him of less than 6 per cent of the total cost of the building, must run his office in the most economic manner possible and take his chance that the work may cost him more than his entire fee.

It seems to be the general impression in many uninformed places that an architect makes a few sketches, taking a few days of his time and for this work receives an enormous fee. The fact of the matter is that to prepare the plans and carry out the work of a $10,000,000 court house, will require the services of from 20 to 30 high priced draughtsmen, as well as a number of engineers and specialists on structural work, heating and ventilation, sanitation, mechanical equipment, etc., working for a period of at least five years; will require a big office at a high rental, and with the most economical administration, his work will cost about $450,000. This will leave him about $150,000 profit, or about $30,000 a year.

What business man is there who is willing to head a $10,000,000 corporation with a salary of $30,000 a year? What corporation is there of this size that pays its counsel less than this amount? Such men, however, receive

these salaries without investing any of their own money to obtain it. The architect must invest about $450,000 in actual cash paid out to receive his profit of $150,000.

All of the above has nothing to do with the professional training and skill of the architect and for which he receives his compensation. He must, therefore, not only invest his own money and run a large business office with a chance of running it at a loss, but he must give his skill to the designing, his knowledge of engineering and construction, and his training in sculpture and mural decoration in order that he may obtain his fee.

Of course, it would be possible for an architect to have his work cost him less than one-half of his commission, and the result would be poorly prepared plans and specifications and inadequate superintendence of the erection of the building, which would result in a greater cost of the building, a far greater cost than any saving in the commission paid to the architect. In carrying out the work of the new court house, the architect will have to give almost his entire time and attention to this one piece of work and in comparison to the fees or salaries paid to the best men in other professions, his compensation will be very small.

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Recent statistics indicate a marked increase in exports of lumber from the United States to the Orient. More than a quarter of a million feet of American woods are reported as being used in Samoa, Hawaii and the Philippine Islands.

Heretofore, it is said, raw materials have been made up into finished articles in the United States, almost without exception and exported as such. With the discovery by American manufacturers in the Philippines that they could import United States woods and make them up with profit there, wood-using factories were built. Pacific coast woods, in consequence, are in many cases taking the place of the native woods.

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Repairing Holes in Concrete Ceilings

Where it becomes necessary to repair a ceiling that has a hole caused by the falling out of some of the concrete, the following method, described by the Concrete Cement Age, will prove satisfactory. The method is to pour a thin grout through a hole drilled through the concrete, the grout being kept in place until its sets by a light panel supported with an upright from the floor. The upright can be of such length as to be sprung lightly in place, or it may be wedged up from the floor.

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Costly European Moving-Picture Theaters

The popularity of moving pictures in London and Berlin is shown by the expensive theaters being erected for their display. A theater recently opened in London cost $633,000, and has a first-class restaurant and well furnished foyer approached by a marble staircase. The interior decorations, in a style described as neo-Greek, are in cream and gold, with carpets and upholsteries of a soft tint of chrysanthemum bronze.

The finest moving-picture theater in Berlin stands in the heart of the fashionable residence section of the capital. The design is that of a Greek temple, and the trimming is in gold and ivory. The roof is removable, so that the audience may have only the stars overhead on pleasant nights.

San Francisco Building Operations

Builders, as well as other business men, complain of dull times. Yet when the figures of contracts let and permits issued for the month are totaled up, September has shown about an average mark. Perhaps it is the general lassitude of affairs and the low margin at which contractors work that is accountable in some degree for the air of unactivity. September has about averaged with the previous months of the year. For private construction the total for the month amounts to $2,231,764. This is divided into the following: For brick and concrete construction, $1,080,092; frame building, $629,415; alterations and additions, $301,361; Panama-Pacific contracts, $220,896. To this may be added city construction work to the amount of $125,200; street and sewer work, $61,685, and U. S. Government work, within the city limits, amounting to $31,740, making a grand total of $2,450,389.

Compared with other years the record for September since 1903 has been as follows:

September, 1904	$1,699,580
September, 1905	1,417,104
September, 1906	5,341,106
September, 1907	3,562,184
September, 1908	3,287,771
September, 1909	1,724,983
September, 1910	1,433,797
September, 1911	2,100,653
September, 1912	1,886,743
September, 1913	2,231,764

It will thus be seen that the total of figures compares favorably with other years outside of what might be called the reconstruction period. It is about time for a reaction in business conditions and it looks that by the end of the year that conditions will be more favorable for the builder as well as everybody else.—Building and Industrial News.

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Building in This City Shows Big Increase

Building construction in ninety cities for September shows an increase in the aggregate of 5 per cent over the corresponding month a year ago, according to figures compiled by the Construction News.

In San Francisco there was a gain of 28 per cent for the month. During September, 1913, there were 386 permits issued calling for buildings, the estimated cost of which was $2,273,723. This compares with 544 permits issued during the same month last year for buildings costing $1,783,145.

In Oakland building operations showed an increase of 45 per cent for the month. The number of permits issued in Oakland during September of this year was 354. These were for buildings valued at $456,425, as compared with 369 permits last year for structures costing $839,440.

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A number of building contractors of San Diego are agitating a plan for licensing contractors in that city, claiming that such a procedure would eliminate the irresponsible contractor and raise the standards of contracting. The movement is an outcome of the situation that has prevailed in San Diego for a short period during which time it is said a number of contractors have failed to complete their contracts and have found it advisable to change habitation, leaving unpaid bills and unfinished work behind. The plan is being discussed by members of the builders' exchange.

The Organized Contractors of San Francisco

By WM. E. HAGUE,

(Secretary of the General Contractors Association.)

For many years the building business of San Francisco has suffered from a lack of proper organized effort for a betterment of conditions. The many bad practices existing among a certain class of architects have been allowed to go unnoticed. The unions have been allowed to adopt arbitrary rules, get higher wages here than in any other city in the United States and impose working conditions which have done much to retard the building industry of this city. The legitimate contractor has suffered from the bad business practices of his competitor.

During the last two years marked progress has been made among the general contractors and the specialty contractors in their various lines to organize along fair and legitimate lines, with the object of improving conditions all around, and the result is beginning to be felt. It is safe to say that the legitimate architect who has suffered from the bad practices of many of his competitors would be glad to see the contractors taking a firm stand against such methods, and the time will undoubtedly come when such a stand will be taken. To accomplish this result, however, we require closer co-operation between the architects and the builders. This has not yet been brought about, but we find that in almost any other city of this size in the United States the architects and contractors meet together at least once a month, either through committees or through general meetings, and much good has resulted. The local Chapter of Architects and the General Contractors' Association, through committees, have several times met to discuss the evils of the building business, but no real practical effort has yet been made to bring the two together. This is partly owing to the attitude of many architects in assuming that there are no interests in common, and owing to this feeling the general contractors have not sought, through their organization, to force themselves and their objects before the local Chapter of Architects. The results accomplished by closer relationship between the architects and builders in other cities have been most flattering, and both parties have benefited. Undoubtedly the time will come when there will be a change of attitude on the part of the architects. It may be, however, that such a time will not be reached until the General Contractors' Association has made more progress in rooting out the evils which have beset their business up to the present time.

Some three and a half years ago an important step was taken in the formation of the Associated General Building Contractors, an organization composed of general contractors who sought to improve the conditions of the building industry. Some seventy of the best general contractors in this city joined the organization in the course of a year, and later amalgamated with the old Builders' Association, which was an organization controlled also by general contractors. The amalgamated body at once incorporated under the name of "General Contractors' Association," and afterwards closed a lease with the Sharon Estate Company for headquarters in a building to be erected on the northeast corner of New Montgomery and Jessie streets, now known as the "Sharon Building." On the ground floor of this building are now to be found the finest building industry headquarters in the United States. They are a credit to the city, and speak louder than words for the success of the General Contractors' Association since its incorporation. Today the association has a membership of 130 stockholders (general contractors), and over 500 associate members (specialty contractors, material men, etc.).

While the general contractors have undoubtedly built up a splendid organization, which is probably the strongest of its kind in the West, there is also another organization, which is perhaps a still greater factor for the general promotion of the building business in this city. I allude to the Building Trades Employers' Association, which was organized about three years ago. It is the central body of the building business, and is composed of three delegates from each affiliated association, of which there are twelve at this time. These delegates meet in regular meeting once a month, and hold as many special meetings as the business of the organization requires. It has proven the most effective organization of contractors which this city has ever had, in dealing with the labor situation particularly. While the body as a whole favors "closed shop" conditions as being the most satisfactory in this city at this time, it has nevertheless several times been called upon to take a firm and positive stand against organized labor. On the several occasions when its power has been brought to bear upon the Building Trades Council, there has never been any question of the ultimate result, and the point at issue in each case has been conceded by the Building Trades Council.

A notable case in point is that of the recent settlement of the difficulty with the Hoisting Engineers' Union. This particular union had a clause in its working rules providing that the men should receive $6.00 pay for an eight-hour day, but common practice in this city, and all other large cities, from time immemorial has been that the hoisting engineer should get up steam for his engine in time to commence work at eight o'clock, and while this clause had been in the rules of this union they had never sought to enforce it, as in many cases it would not be practicable, owing to the fact that mechanics in practically all trades work eight hours and receive eight hours pay.

Some six weeks ago the hoisting engineers decided that they should get time and a half for the time they spent in getting up steam, and served a twenty-four hour notice to that effect on the contractors employing them. Those chiefly interested were the steel erecting contractors, who had, of course, figured on the old working conditions and could not very well afford to pay anything extra to their engineers. The demand practically meant an increase of a $1.15 a day, which would have made the hoisting engineer the highest paid mechanic on the building. The contractors affected took the stand that ninety days' notice of this demand should be given to them, this being the custom in this city for many years past. The unions claimed that the rule had been adopted three years previous and could be put into effect overnight at any time. On this point the two parties split. On several of the jobs the steel erecting contractors, under instructions from their association, started the hoisting engineer to work at eight o'clock in the morning, and put the erectors to work at nine o'clock, paying the erectors at the end of the week for seven hours' work each day. As a result the erectors struck with the support of the Building Trades Council. Later unable to settle the controversy the Erectors' Association of California referred the matter to the Building Trades Employers' Association. That body at once took the situation in hand, and several conferences were held between its committee and a committee from the Building Trades Council, including Mr. P. H. McCarthy. The Building Trades Council demanded that the erectors be paid eight-hours' pay for the seven hours they had worked, and insisted on the enforcement of

the engineers' eight-hour rule without further notice. The Building Trades Employers' Association being unable to adjust the difficulty, a referendum vote was taken in each affiliated association to lock out the building industry on Monday morning, September 22nd. All preparations were at once made to establish the lockout effectively from the time of its commencement. The demand of the Employers' Association was that the men return to work under the old conditions and that ninety days' notice of the proposed change in working conditions be given by the Building Trades Council, and the employers absolutely refused to recede from this position or to change their demand in any respect whatever. The result was that at the ninth hour, namely, Friday, September 19th, Mr. McCarthy and his committee at nine o'clock in the evening appeared in the office of the Building Trades Employers' Association in the Pacific Building, and signed an agreement conceding the demand.

This controversy decided (it is to be hoped for all time) the important principle of recognition by the Building Trades Council of the authority of the Building Trades Employers' Association as the central body of the building business, and one which the council must deal with and recognize. It also decided that such matters must in future be arbitrated, and that ninety days' notice must be given by any union of any proposed change in working conditions. Had the Building Trades Council not receded from its position there is no question but that the building industry of San Francisco would have been effectively tied up for a period which it is hard to foretell, and the final alternative of "open shop" might have been necessary. The city is to be congratulated that this controversy was peaceably settled, and that the principle of right and fair dealing on the part of the union was driven home to the Building Trades Council.

Strikes, lockouts or boycotts are always an expensive thing for either party to the controversy, and if the contractors continue to build up their organizations and their central body there is no reason why the union labor problem, which has been a menace to the welfare of this city, can not be dealt with effectively and peaceably.

A practice of the unions and the Building Trades Council, which the contractors in their various associations are seeking to abolish, is the citation of employers to appear either before the union or the Building Trades Council. Controversies where the two parties are at loggerheads are now being turned over to the association of the contractor at interest, and the unions are being made to deal with the Employer's Association instead of being allowed to deal with the contractor individually, as in the past. This is particularly true of the General Contractors' Association. All controversies in that body between a stockholder and any union are now promptly turned into the secretary' office and adjustment made through the writer and the business agent. If necessary, the Arbitration Committee of the association is called on to deal with the difficulty and to meet with a committee from the union. This, however, seldom happens. In the past year in performing my duties a large number of such cases have been settled, and it generally happens that the dispute can be adjusted to the satisfaction of all parties concerned with very little trouble and in a very short space of time.

This principle of collective bargaining which the unions have effectively enforced in this city for many years past must be granted to the employers. It frequently happens, even yet, that a business agent will refuse to deal with the Employers' Association. In such cases, however, it simply means that the business agent knows he has no case, and is simply arbitrarily trying, through the power which he thinks his union has, to enforce some demand which he knows is not right. The contractors propose to insist upon the principle of collective bargaining which the unions have so ruthlessly enforced in the past.

Unfortunately, not all of the different crafts of the building business which are organized at this time are in accord with the policy of the Building Trades Employers' Association and its affiliated associations. Several associations not affiliated with the Building Trades Employers' Association have agreements with their unions, some of which are more or less effective.

A close observer of the results obtained by such agreements, not only in this city but elsewhere throughout the United States, is bound to come to the conclusion that there is no ultimate benefit to be gained by them, and such agreements are frequently misused to create a combination, which is distinctly in restraint of trade but not always amenable to the law.

When such agreements are entered into they become binding upon the employers, but nearly all unions throughout the country having agreements with their employers have failed on their end of the contract when an issue arose.

It may be well to remark in passing that no association affiliated with the Building Trades Employers' Association has any agreement with its union. This does not mean that there is any lack of harmony between the two, but rather that the policy of agreements with unions is discouraged by the Employers' Association, and this policy was only adopted after a very careful and thorough review of the results obtained here and elsewhere in the past through the medium of such written agreements.

The general contractor is, to a certain extent, the key to organized effort in the building industry of this city. For many years he had really no organization worthy of the name, and it was said that it was impossible to get them together in a strong association which would operate on broad and legitimate lines for the protection of its members. However, all such efforts depend entirely upon the manner in which they are undertaken and the policy which may be adopted. Today the general contractors in their association stand together as never before in the history of this city, and they stand for what is right and just and against the many evils which have beset the business of recent years. To overcome these evils, however, is a herculean task, which can only be accomplished by steady, consistent effort, which may have to cover a period of several more years before it can be said that the general contracting business of this city is on a legitimate basis. In the final accomplishments of the results aimed at there is no question that the architect will become the key to the situation, and sooner or later a determined, concentrated and amalgamated effort between the General Contractors' Association and the local San Francisco Chapter of the American Institute of Architects must be made to stamp out the illegitimate architect and the illegitimate general contractor. Such practices as the peddling of bids by the architect and general contractor, the substitution of inferior materials, etc., must be entirely eradicated. This has already been accomplished in many cities of this country, and will eventually be brought about in San Francisco.

The adoption of the present lien law some two years

ago undoubtedly did much to eradicate the irresponsible contractor, and our old friend the "go-as-you-please contractor" has today been practically eliminated from the building business. For years he was a menace to the welfare, and it was thought that he had come to stay for all time. While it is true that contractors still fail in business, the bond now given by the surety companies to the owner has become a dollar for dollar good bond, and subcontractors and material men now receive their full money, whether the contractor is forced to the wall or not. If that much was accomplished, why can not we go the rest of the way?

Segregation of work on a building, which was carried on very extensively a few years ago, was another considerable source of evil. The taking of segregated bids and general bids was a result to be avoided and worked an evil not only on the general contractor and the specialty contractor, but undoubtedly in many cases resulted in a building which was unsatisfactory to the architect and will never satisfy the owner. A certain amount of segregation of work on very large buildings is probably necessary and advisable, but it is a positive menace to every one when undertaken on regular contracts.

Another evil which has beset the building business for the last several years is the overcrowded architectural profession, and the fact that there are too many contractors in all lines of the building business for the amount of work which has been coming out. With the building of the World's Fair in 1915 and the opening of the Panama Canal, it is to be hoped that this condition will be changed, and that San Francisco is about to enter upon a period of prosperity such as she has never before known. Let us hope so! Otherwise, unless we have a plague, we may shortly expect to see the poor farms in this vicinity filled with former architects and contractors.

Composition Floors

In 1866, Stanislas Sorel, a French engineer, patented this composition, in this country, and about the same time patented the cement much used by dentists, which is of a nature similar to the now fashionable cement of magnesia, but having zinc as its base. This Sorel stone, as it was formerly called, has found a large use in Germany and elsewhere in Europe, principally for making sanitary floors, countertops and for steaming decks.

Its slow hardening or setting is a desirable feature of this material; the chemical reaction taking place slowly through a period of say 24 hours, is much preferable to a quick set. For instance, I have had floors that set in a half hour's time. I have also had floors on which the chemical action took place so rapidly as to produce a creepy hiss, sufficient to keep one's hair!

In Europe most of the floors are covered like hardwood floors when in a glassy state, later on finished by polishing, then oiled or waxed. This produces a very beautiful "Steinholz" floor. I am acquainted with formulas and work of about 20 European concerns, having visited them and seen much of their work. They attempt on the whole much more colorful work than is usually done by the manufacturers in this country. Their color and materials are more plastic in effect. Very artistic marble or terrazzo effects are produced and floors old for weeks with floors still wear and look well indefinitely. I have laid such floors in banks and court houses in this territory with good success also, to the fact that their factors properly attended to such work and coloring.—Concrete Cement Age.

The Great Clay Products Industry

The great magnitude of the clay working industry of the United States is shown on a chart just issued compiled by Jefferson Middleton, of the United States Geological Survey. This chart shows a total value for 1912 of $172,811,275, which is an increase of $5,805,5364 over figures for 1911. These products include the several varieties of brick, drain and sewer pipe, terra cotta, pottery, fire brick, and other clay products, the various building bricks representing the greatest value, with a total of $73,422,849. The number of building bricks manufactured was 10,281,141,000.

Ohio led the states in the value of her clay products with an output amounting to $34,811,508 or over one-fifth the total production for the United States. Pennsylvania was second, with a production valued at $21,537,221; New Jersey third, with $19,838,533, and Illinois fourth, with $15,210,990. Eight states produced clay products in 1912 to a value exceeding $5,000,000, and 26 states to a value exceeding $1,000,000.

Ancient Persian Brick

Mr. Alexander Bigot reported at the Academy of Inscriptions and Literature that the Persian bricks which were found recently had been investigated and they proved to contain over four-fifths of sand and the balance was lime. But they had no clay particles in their composition. Some rubbish brick were also examined, and especially those that were not glazed, and it was found that they were made of clay intermixed with lime. He has therefore come to the conclusion that the industry as carried on by the Persians about 500 years B. C. was not a ceramic industry as has been supposed to be, but an industry of lime mixtures, of high purity and perfection, that it has not been possible up to the present date even to imitate or reproduce same to any extent.—Revue Generale de Ceramique No. 7, 1913.

Iceless Refrigerator Uses Old Way of Cooling

A new type of refrigerator that uses an old principle of cooling has recently been perfected, and is intended particularly for use in localities where ice is scarce or expensive. This refrigerator consists of a cylinder of galvanized wire screen, of one-quarter inch mesh, covered with a special absorbent cotton cloth, and provided with a sheet-metal base and lid. The lid is built so that it may be removed, leaving a hole in the center into which water is poured daily. A sixth lining of the lid is so arranged that a number of wicks hang over the edge into the water. These take up the water by capillary attraction, and pass it into the cloth lining of the main body, which soon becomes saturated. Evaporation of the water keeps the temperature inside the refrigerator at about 50 degrees, which is said to be sufficiently low for the preservation of fruit, meat or vegetables.

Exports of Clay Products

The exports of domestic clay products from the United States in 1912 were valued at $1,176,0[illegible] an increase of $[illegible] per cent. In 1911 there was exported $1,021,118, or 8[illegible] per cent. Of these exports 57 per cent was brick and tile and 23.15 per cent was pottery. Brick and tile exports increased [illegible] per cent, in 1911 per cent.

"Law of 1872" Inoperative

A recent court decision declaring inoperative the law of 1872 requiring architectural competitions on public buildings has just been brought to the attention of the committee appointed by the Southern California Chapter of the American Association of Architects to arrange for a suit to test the validity of the law. Mr. J. E. Allison, chairman of the committee, has just ascertained the facts in the case. The court holds that the law of 1872 has been in effect repealed by subsequent acts of the legislature regulating the manner of letting contracts. This is in line with the opinion given by Attorney General Webb in response to an inquiry by the state superintendent of schools. Following is a statement of the case prepared by Mr. Allison:

"Archt. John J. Donavan of Oakland was employed by the board of education of Sacramento by direct appointment to design and prepare plans and specifications for a school building to cost approximately $200,000.

"Some citizens had a lower court issue an injunction restraining the board of education, county school superintendent, auditor and treasurer from making payments to the architect employed. This injunction was issued on the ground that the board of education had not complied with the law of 1872 in making a contract with the architect for this work in as much as they alleged that the board did not advertise for plans and specifications.

"The trial to dissolve the injunction was tried at Sacramento August 6 before Judge Wood of the superior court. The restraining order was dissolved on the ground that subdivision 22, section 1617, of the Political Code replaced the Act of 1872 in spirit by the fact that this section 1617 relieved the board from requiring a bond from architects submitting drawings and specifications; and further, the judge stated, that there was no specific way in which the board could advertise for plans and specifications, contending further that section 1617, namely, the elimination of the bond, repealed the law of 1872 in its entirety because furnishing a bond was the purpose of the law and it was not to advertise for plans and specifications that the Act of 1872 was framed.

"The sole question before the court was whether or not the Act of 1872, page 925, was repealed. The contention of the attorneys for the architect was based on the following propositions: First, that by subsequent acts, the same was repealed as to state pleadings, by the Act of March 23, 1876 (Statutes of 1876, page 427), and the Act of March 23, 1901 (Statutes of 1901, page 641), and the acts of 1909 and 1911.

"As to counties the same as repealed by the county government act. As to municipalities, the same was repealed by municipal corporation act adopted in 1909 (Statutes of 1909, page 27). As to school districts, the same was repealed by subdivision 22, section 1617, of the Political Code, and subdivision 11 of section 1543 of the same code.

"Where the legislature has enacted subdivisions with relation to special subjects, such as school districts, these special provisions are not affected by general laws.

"This opinion supports the opinion of Attorney General Webb, dated December 6, 1912, bearing on the same question."—Southwest Contractor and Mfg.

Steps to Wear Forever

By mixing carborundum with concrete a Paris architect succeeded in building a stairway in a public building that seems to defy wear despite its use by thousands of persons daily.

Model Houses for Workingmen

Homes that workingmen can purchase at a total cost of 83 cents a day are about to be built in Queens. Plans for 150 such building have been prepared and for them there are already 600 applicants. The idea is that of Dr. Joseph Caccavajo, a civil engineer, and authority on housing problems, who has the co-operation of several of the large industrial concerns recently located in Long Island City. The scheme is not a philanthropic one but has for its object the making of profits while supplying workingmen with livable homes at low cost.

Dr. Caccavajo, discussing the scheme, said recently that he proposes to construct two-story brick, stone or hollow tile houses of the type familiarly known as Philadelphia houses, containing six rooms and bath, which the wage earner can purchase on the same basis as though he were paying rent. These houses will be far superior to the best types of England, Belgium and Germany, where so much thought has been given to the proper housing of workingmen. Cottages will range in price to meet the incomes of purchasers and it will be possible for workingmen to buy homes for a price as low as 68 cents a day, which with taxes, water and fire insurance, will bring the total cost up to 83 cents.

The only conditions to be exacted are that those purchasing the houses shall be of good moral character; that they have been steadily employed for a period of not less than five years; that their present employers recommend them as men or women who can be depended upon to meet their obligations that there shall be at least one, and preferably more children to each family, and that the general health of the members of the family shall be good.

The first group of buildings will be built in Long Island City, where the growth of industrial plants has created a demand for homes for workers. That group will contain about 150 houses. They will be one-family houses with at least three bedrooms, a living-room, kitchen and bath. The cheaper houses will be built in rows and the more expensive will be of the semi-detached type, with gardens on three sides.

What the Smoke Nuisance Costs

It is stated on good authority that the smoke nuisance costs the American people nearly $50,000,000 every year. This figure includes losses of all kinds, of which the deterioration of materials of various kinds is probably the greatest. But the one item of cleaning the faces of the big modern buildings annually of their coating of smoke and soot is an important one, as may be understood after a little observation in almost any large city during the spring or summer. A European artist who visited this country recently was quoted as saying that American cities would be more beautiful if there were more smoke to tone down the sharp outlines of the buildings and reduce their bright coloring to a soft, pleasing gray. But this ultra-artistic view is not likely to make much of an appeal to the owners of buildings who have to foot the annual cleaning bill.

Just what this bill must be is indicated by the elaborate and costly procedure necessary in cleaning a skyscraper. The work is all done by hand from a scaffold swung by ropes from the cornice of the building. This scaffold is under the control of the workmen as they do the cleaning, being shifted up or down as required by the ropes which run through blocks at the top. The work begins at the top, and a strip from 12 to 16 feet wide is cleaned down the face of the building to the bottom.

The scaffold is then drawn back to the top of the building and shifted into position for the next strip, this process being continued until all the faces of the building are cleaned. Soap and water are not sufficient for the purpose, and it is necessary to use an acid to cut the mixture of smoke, soot, and slime. Ordinarily, hydrochloric acid is used, mixed, half-and-half, with water. To get an idea of the amount of dirt that collects on a building in the course of a year it is only necessary to note the difference between the washed and unwashed portions in the building. Where a building is faced with glazed terra cotta such a mixture removes the dirt readily and completely, but even then the cost for cleaning may run anywhere from $500 to $2,000. If a building is faced with granite or stone of any kind, the process of cleaning it becomes much more complicated and expensive, since the dirt sinks into the pores of the stone. Some such buildings have been cleaned by being brushed over every inch of their surface with fine steel-wire brushes, while others have had a micro-scopic layer of stone removed by a sand blast, the cost by either method running into thousands of dollars in the case of a large building.

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Heating and Warming in Germany

A consular report recently issued by the U. S. Government from Washington describes some points in current German practice. It is stated that modern methods of installing hot water and steam heating were brought to Germany from America, but that the German heating engineers now believe themselves to be far ahead of the United States both in theory and practice. At the larger technical schools, notably at Charlattenburg, Hanover, and Dantzig, regular courses in heating and ventilating engineering have been added to the curricula, and degrees in the subjects corresponding to bachelor of science and doctor of science are granted. Scientific study has enabled Germans to compete in this industry with foreigners not only in Germany, but in most other countries where tariff restrictions are not too great. The hot-water apparatus used in South America, Austria, Russia, and the Orient is almost exclusively German.

The German designers have derived much advantage from careful and theoretical study of the subject, particularly in respect of the cost of laying out steam and hot water systems. An accurate knowledge of efficiencies and capacities of various sizes of pipe suitable to a given scheme enables them often to reduce the factor of safety in their estimates and consequently to plan their schemes with a minimum cost for material. On the question of prices for boilers and radiators it is stated that boilers for warming houses by both steam and water systems are sold on a basis of heating surface. The average price is 900 to 2700 per square metre (10¾ square feet) heating surface. Radiation on the same basis costs from 600 to 700 per square metre heating surface, while an additional 20 per cent is usually assumed to be a fair price to cover the cost of installation.

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Applying Calcimine Evenly

When applying calcimine, alabastine or paint, if it is to be rubbed down, put on the different layers at right angles. The first coat, which dries, is composed of fine ridges of color. When the second coat is applied these ridges hold the color between them, thereby rubbing the surface to be covered evenly and beautifully.—Contributed by Jas. M. Kane, Doylestown, Pa.

Quicksand Frozen in Building Work

Quicksand was encountered in the excavation for the foundation of a large building in Harlan. To overcome the difficulty a frozen wall was formed by inserting 5 inch freezing pipes into the sand. These pipes were closed at the bottom and located about 5 feet apart. They were fed by 1-inch brine pipes connected to a supply header. The method worked excellently, and was more than a fortunate system had been sunk.

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Restricting the Heights of Buildings

Apropos of the discussion which has been going on for some time past with regard to limiting the heights of buildings in New York City, Robert Grier Cooke, president of the Fifth Avenue Association, which has gathered much data on the subject and placed it before the newly created commission to inquire into the practicability of limiting the height of buildings in the city, expresses some views which may not be without interest. After commenting upon the height to which buildings are permitted in many of the leading cities of this country he refers to conditions in some of the foreign cities as follows:

"As America is the home of the skyscraper the limits to building heights here are placed far higher than in the great cities of Europe. Berlin permits a maximum height of 72 feet, but no building can yet higher than the width of the street. The maximum height allowable in Cologne and in Dusseldorf, known as the 'garden city of Europe, is 65 feet 6 inches. Munich draws the line at a building having a ground floor and four stories, not counting a mansard.

"Frankfort, Germany, is divided into zones, the maximum height for buildings varying from 58 feet 11½ inches to 65 feet 6 inches in the inner city. In Munich a maximum height has been fixed at 45 feet.

"In London, according to the building act of 1894, on a street under 50 feet wide all buildings are limited in height to the width of the street. In streets more than 50 feet wide no building can be put up which rises more than 80 feet into the air. In Birmingham, England, the height of building is regulated in accordance with a proviso that a line drawn upward at an angle of 45 degrees from the edge of the premises will meet no resistance.

"Paris does not permit a facade higher than 65 feet, while in Rome the height limit is set at 78½ feet. With a minimum height required of 45 feet.

"Taking into consideration all these limitations which have been thrown around new building, consternation in these world cities doesn't seem to be the thing had arrived in New York for building is impossible in the future to erect ultra high buildings in districts where such structures are obviously not desired and not necessary. The Fifth avenue section is such a district. The ultra towering loft structures are not to the street and those built in the last two years or so, with their countless fenestrations and swarms of workers that inundate the avenue's pavements and blight its best tenant business, have already worked numerous changes in the shopping district and its interests. Unless the present tendency to rise the skyline with skyscrapers of this stage is speedily checked Fifth avenue will soon be a cheerless, inelegant canyon with none of its present charm, and filled with a struggling mass of tenements having nothing in common with the street's present purposes. Why not follow the wise example set by numerous other American and European cities in holding business within reasonable limits as to height?"

Carrara Marble and Where It Comes From

One of the oldest industries of the Old World is the quarrying of Carrara marble in Italy. Contrary to general belief, the Carrara Mountains of Apuan Alps are not composed entirely of marble, although deposits occur throughout the group, which extends nearly parallel with the coast for about 40 miles from Aulla, on the river Magra, to Lucca. Undoubtedly the largest and best deposits are at or near Carrara, where there are four hundred and ninety-five quarries out of a total of seven hundred and twenty-two in the entire district in active operation. The product of these Carrara quarries has been known for centuries throughout the civilized world; and although other marble has been sought and many deposits discovered and developed in other countries, no superior or equal of the Carrara product has yet been found. This is shown by the fact that the demand is steadily increasing, despite the advanced cost of production of recent years, which has caused higher prices. In fact, the demand for certain quantities of Carrara marble is often greater than the supply.

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Artificial floorings are now being made out of sawdust concrete. The cement used consists of a solution of magnesium chloride to which pulverized magnesia is added. The sawdust is then used in any desired quantity. Floors manufactured in this way are more resilient than concrete, and are not good conductors of heat. They wear well, and do not burn, charring under the fire test.

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White Terra Cotta

Apparently white terra cotta is becoming a favorite building material in New York. A number of the more recent structures have more or less of it, not only in their ornamentation, but in the principal walls. The use of white and cream terra cotta was made notable on the Woolworth building, the largest office building in the world. All the exterior decorations of the Hotel Mc-Alpin, the greatest hotel in the world, are white and cream terra cotta.

At Madison avenue and Twenty-fifth street an office building is in process of erection which is all white terra cotta above the second or third floor. The decorative features are very elaborate and the building itself is not unlike marble in appearance.

On Forty-second street, near Broadway, a high building is going up, the upper portion of which is white terra cotta, and the scheme of decoration is very attractive. Of course, there are many others in which white terra cotta is used very extensively and gives the building a distinction otherwise unobtainable, and the decorations possible with terra cotta far exceed those with any other material, while permanency is no longer in doubt. Expensive preservative applications are never required when terra cotta is used, while marble and some other varieties of building stone are often found to be deteriorating after a few years and some preservative process is necessary to prevent destruction.

With fireproof partitions and floors, brick walls, with terra cotta outside, the modern building is an example of the encasing of a steel frame in an indestructible clay envelope, guaranteeing immunity from fire and freedom from the dangerous weathering processes to which all stone buildings are subject, particularly in the damp climate which characterizes New York.

Free Hand Book For Architects

A well edited book, bound in leather, is being compiled for distribution among the California Architects. It will contain all the State Building Laws and Acts up to date thoroughly revised, also the Building Ordinances of Los Angeles and San Francisco, together with a complete directory of Architects in the state.

The book will be off the press in January and any Architect desiring a copy may have it without cost or obligation by writing H. A. Arenz, 408 Byrne Building, Los Angeles, Cal., at as early date as possible.

Any Architect having changed his address or expects to soon, should write the above in order to make the new Directory complete and up to date.

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New Architects for Portland Postoffice

Senator Lane proposes to introduce a bill amending the law providing for the Portland postoffice building so that it may be built to accommodate other government offices. He will endeavor to have provision made for a new building eight stories high instead of that of two stories proposed by the supervising architect. The competing architects selected in place of the original list who refused to conform to the department program are: Louis Hobart, San Francisco; Goodrich & Goodrich, Portland; James G. Roger, Griffin & Wynkoop, Stein & Fellheimer, and Clinton Russell of New York.

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Stucco Finish Causes Worry

Considerable discussion is taking place in Cincinnati architectural circles, as well as among some owners of homes of a certain type, as to the causes which brought about defects in stucco construction on brick, says the Cincinnati Enquirer. It leaked out yesterday that one owner of a handsome residence in East Walnut Hills, completed last year at a cost of $35,000, must spend at least $10,000 this year in putting a brick veneer about the house. Near by is another costly home of the same exterior style, which was occupied for the first time last year. There were some minor defects in the method of putting on the finish, which was apparent at the time, but since the warm weather has set in, chunks of the cement surface have fallen away from the brick walls, leaving the home in an unsightly appearance. Architects and contractors, who have made a special investigation, found that in many instances a part of the brick surface was torn away with the cement. This has caused a controversy to arise as to whether the brick has not had something to do with the trouble of the owners.

Both houses were finished just before winter set in. Some of the architects believe there were small crevices in the cement finish, which permitted water to seep under the surface and freeze, and when warm weather came something had to give way. The fact that the break took with it part of the brick surface was a surprise to those who have investigated the situation. One architect contended that machine-made brick have not given the same results as those made by hand, when used in connection with a cement finish. No fault, it is said, has been found with stucco work when applied on lathing, although many owners do not like this method, preferring to have a brick for surfacing with cement. The subject will no doubt be thoroughly investigated by the architects, as many are partial to this type of architecture. Some of the craft state they were not paid sufficiently to make a set of plans, superintend the construction and also give the workmen a course in cement work.

Aero Plan of Solano City, Cal
Planned by Mark Daniels, Landscape Engineer

Photo by Gabriel Moulin

Residence Mrs. Lawrence Meyer, San Francisco, Cal.
Mr. Schuett, Superintendent. Architect.

Photo by Gabriel Moulin

Living Room, Residence Mrs. Lawrence Myers, San Francisco, Cal.
Mr. Sylvain Schnaittacher, Architect.

Photo by Gabriel Moulin

Sitting Room, Residence Mrs. Lawrence Myers, San Francisco, Cal.
Mr. Sylvain Schnaittacher, Architect.

Residence Mr. J. H. Berghauser, Belvedere, Cal.
Mr. Albert Farr, Architect, San Francisco, Cal.

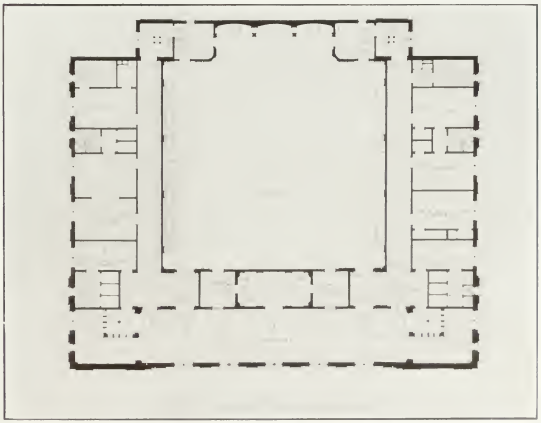
Residence Mr. Edward Holmes, Belvedere, Cal.
Mr. Albert Farr, Architect, San Francisco, Cal.

Hall, Residence Mr. Edward Holmes, Belvedere, Cal.
Mr. Albert Farr, Architect, San Francisco, Cal.

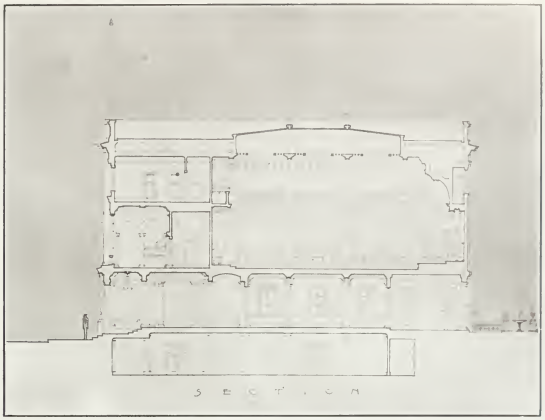
Living Room, Residence Mr. Edward Holmes, Belvedere, Cal.
Mr. Albert Farr, Architect, San Francisco, Cal.

Living Room, Residence Mr. Edward Holmes, Belvedere, Cal.
Mr. Albert Farr, Architect, San Francisco, Cal.

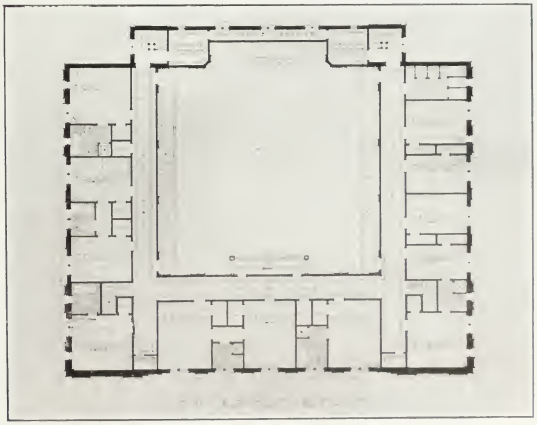
Elks' Building, Berkeley, Cal
Mr. Walter H. Ratcliff, Jr., Architect, Berkeley, Cal.



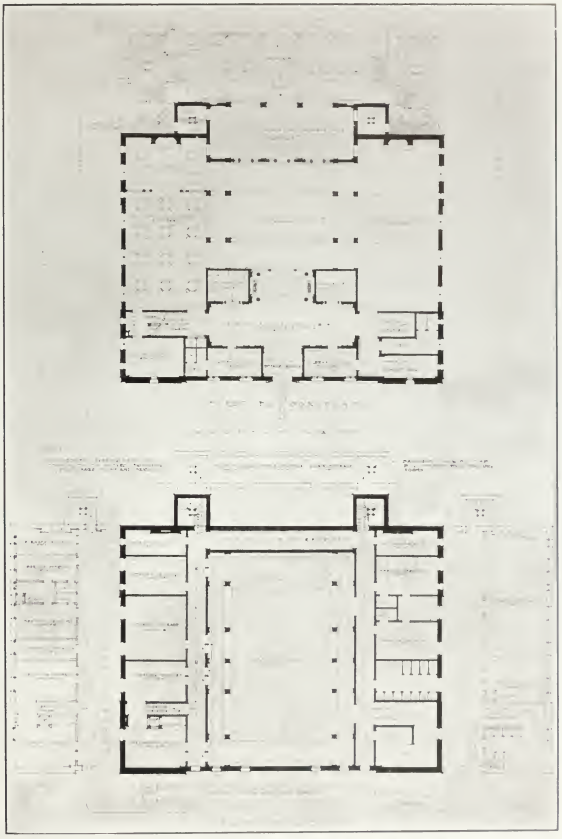
Second Floor Plan, Elks' Building, Berkeley, Cal
Mr. Walter H. Ratcliff, Jr., Architect, Berkeley, Cal.



Section Elks' Building, Berkeley, Cal.



Third Floor Plan, Elks' Building, Berkeley, Cal.
Mr. Walter H. Ratcliff, Jr., Architect, Berkeley, Cal.



First and Basement Floor Plans, Elks' Building, Berkeley, Cal.
Mr. Walter H. Ratcliff, Jr., Architect, Berkeley, Cal.

THE AMERICAN INSTITUTE OF ARCHITECTS

The Octagon, Washington, D. C.

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Chairman of Committee on Public Information, George B. McDougall, 235 Montgomery Street.
Date of Meetings, third Thursday of every month; annual, October.

Southern California Chapter, 1894—President, John C. Austin, Wright and Callender Building, Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Bryne Building, Los Angeles.
Date of Meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, Edgar M. Lazarus, Chamber of Commerce Building, Portland, Ore. Secretary, Harrison A. Whitney, 912 Lewis Building, Portland, Ore.
Chairman of Committee on Public Information (Not known).
Date of Meetings, third Thursday of every month, (Portland); annual, October.

Washington State Chapter, 1894—President, W. R. B. Willcox, 214 Central Building, Seattle, Wash. Secretary, Chas. H. Alden, 609 Eilers Building, Seattle, Wash.
Chairman of Committee on Public Information, Chas. H. Alden, Cary Building, Seattle (till further notice send all communications to V. L. Loveless, 620 Colman Building, Seattle.)
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November

San Francisco Chapter A. I. A.

The regular meeting of the San Francisco Chapter of the American Institute of Architects was held at the Tait-Zinkand Cafe, on Thursday evening, September 18th, 1913. The meeting was called to order at eight o'clock by Mr. Geo. B. McDougall.

Members present were:

Geo. B. McDougall	President
Edgar A. Mathews	Vice-President
Sylvain Schnaittacher	Secy.-Treas.
Wm. B. Moser	Trustee
Cannon, Edward W.	[illegible], A. Patterson
Dercke, August R.	Schoolcraft, Albert
Headman, August G.	Schultze, Henry A.
Joseph, Bernard J.	Shea, Edward T.
Lichenstein, Milton	Stanley, E. J.
Loliquist, John O.	Tyler, Thos. J.
O'Brien, Matthew	Weeks, C. A.

MINUTES

The minutes of the regular meeting of August 28th, 1913, were read and approved.

STANDING COMMITTEES

Sub-Committee on Public Information.

Mr. Moser for the Committee [illegible] the Committee had [illegible] of the five daily papers and had advised them that the Chapter's Committee would be glad to furnish them with any information regarding professional matters and also to have the real estate editors or whom ever the papers would designate, put on the subscription list of the Journal of the A. I. A., so that the press might be better informed as to matters concerning the profession.

A response had been received from the San Francisco Chronicle, designating the editor and also the editor of the Real Estate Department to receive copies of the Journal. The Chapter authorized the Committee to have two copies mailed as requested.

Sub-Committee on Competitions, A. I. A.

Mr. Moser, a member of this Committee, reported that a particularly vicious program was out by the Kern County Jail, but that the matter was outside the jurisdiction of this Chapter. Also that a competition had been held for a City Hall in Merced, [illegible] under unfavorable conditions.

Mr. Moser also referred to the proposed competition for the Portland Exposition, for which a program had been issued, and for participation in which nine architects had been invited—four from Portland, four from eastern cities, and one from San Francisco. He stated that the San Francisco firm, namely Tabs and Laville, had brought the matter of the program to the attention of the Institute's Committee on Competitions [illegible] according to the above, one of

accordance with the code, the program was subsequently withdrawn. A letter was also read from Glenn Brown, Secretary of the Institute, which gave a statement relative to the same matter.

Architectural League and Education Committee.

This Committee had nothing to report.

San Francisco Building Laws Committee.

As meetings had not been resumed since the vacation period, the Committee made no report.

Committee on Commercial Bodies.

No report.

Publicity Committee.

Mr. Welsh read a written report, which was ordered received and placed on file, and to be taken up later for discussion.

SPECIAL COMMITTEES

Committee on Legislation.

Nothing to report.

Committee on Buildings in the Civic Center.

Mr. Mooser, Chairman of this Committee, made the statement that no program had as yet been issued in the matter of the competition for the Public Library, although the statement had been made that the reason a limited competition was to be held, was owing to the necessity of saving time.

Education Committee on Practice.

In the absence of Mr. C. P. Weeks, no report was made.

City Beautiful Convention.

Mr. Vogel, for this Committee, stated that there had been no meeting of the Committee and that he wished further information as to the purpose of the Committee.

Committee to Consider Communication From Housing Association.

Mr. Mooser stated that the Committee had not been able to hold a meeting, therefore had nothing to report.

COMMUNICATIONS

The following communications were received and ordered placed on file:

From Glenn Brown, Secy. A. I. A., letter enclosing copy of the report of the Committee on Architectural Exhibit at the P.-P. I. E.; from Theodore Hardee, Chief of Liberal Arts of the Exposition, in regard to the above report; from Glenn Brown, regarding program of competition for a U. S. Postoffice in Portland, Ore.; from Mayor Rolph, acknowledging Chapter's communication containing resolutions passed at the meeting of August 28th; from the Chicago Architects' Business Association, in regard to uniform size for architectural publications; and from the Washington Chapter, A. I. A., list of nominees for Officers and Directors of the Institute for the ensuing year; also copy of proposed Amendment to the By-Laws to be acted upon by the Forty-seventh Convention; and Arguments which prompted the Washington Chapter to propose the amendment.

UNFINISHED BUSINESS

In the matter of the requirements of the Board of Public Works as to data to be furnished for Class "A," "B" and "C" buildings it was duly moved, seconded and carried that the Chapter endorse the position taken by the Board of Public Works in this matter; and the Secretary was directed to so notify the Board.

NEW BUSINESS

In the matter of the communication from the Chicago Architects' Business Association, the Secretary was directed to sign the petition as requested.

In the matter of the communication from the Washington Chapter, A. I. A., relative to the endorsement of officers of the Institute for the ensuing year, on motion duly made, seconded and carried, the Secretary was directed to advise the Washington Chapter that the San Francisco Chapter endorses the candidacy of Octavius Morgan of Los Angeles, for the office of Director of the Institute.

After some discussion, on motion made, seconded and carried, the Chapter went on record as endorsing the publication of the Hand Book for Architects and Builders, published by Harry A. Arenz, Byrne Building, Los Angeles.

The following resolutions were offered by Mr. T. J. Welsh and unanimously adopted:

WHEREAS, The Committee of Publicity has for a period of two years called the attention of the Chapter to the fact, that by reason of indifference and lack of interest, the work that should go to the Architectural profession is now being done by contractors, and others, with the result that many are losing business, and many draughtsmen are idle.

RESOLVED, That the members of this Chapter who are members of the State Board of Architecture together with our President, wake up and take energetic steps to prosecute persons who are practicing Architecture without a license, and if necessary, to employ special counsel.

Thos. J. Welsh,
J. Patterson Ross,
Albert Schroepfer.

On motion duly made, seconded and carried, the motion was called for reconsideration. After some discussion the resolution was readopted, and the Secretary was directed to send a copy to the State Board of Architecture, and a Committee of three was to be appointed by the Chair to ascertain and report on the conditions mentioned as existing, concerning the architectural work of the City of San Rafael, County of Marin, as mentioned in the report of the Publicity Committee. Messrs. T. J. Welsh, F. T. Shea, and Milton Lichenstein were appointed members of this Committee.

NOMINATION OF OFFICERS

The next order of business was the nomination of officers for the ensuing year. The following were placed in nomination in accordance with the By-Laws, and duly declared the nominees to be voted upon at the annual meeting in October:

President	W. B. Faville
Vice-President	E. A. Mathews
Secretary-Treasurer	Sylvain Schnaittacher
Trustee	Henry A. Schulze
Trustee	Geo. B. McDougall

ADDITIONAL BUSINESS

Announcement was made by Mr. Mooser that a movement was on foot to bring a Convention of Architects to this city during the 1915 Exposition. Also that at some future meeting Mr. G. A. Wright would take the opportunity of giving the Chapter a talk on "Quantity Surveying." Other interesting discussions of usual matters concerning the welfare of the Chapter continued until adjournment was taken at 11:25 p. m.

Edgar A. Matthews Appointed

Governor Names San Franciscan to State Architectural Board.

Governor Johnson has appointed Edgar A. Matthews of San Francisco a member of the State Board of Architecture, for the northern district, vice Lionel Deane, resigned.

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The Northern District Board, California State Board of Architecture, following the precedent set by the Southern District Board, will in future hold its written examinations in the Department of Architecture at the State University, Berkeley, California. The regular meetings of the Board for the examination of candidates will be held at the Phelan Building as formerly. The board has in course of preparation a pamphlet giving all necessary information to applicants for certificates to practice architecture, by applying to the California State Board of Architecture, 1034-1040 Phelan Building, San Francisco, California. A list of architectural books is given in the pamphlet and the books are valuable at the rooms of the board for reference.

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Los Angeles Architects Meet

The regular monthly meetings of the Southern California Chapter of the American Institute of Architects have been resumed after the summer vacation, the first meeting having been held Wednesday evening, September 10th. President John C. Austin presided and there was a large attendance.

A movement was started to have the law of 1872 declared unconstitutional and a committee composed of J. E. Allison, H. M. Patterson and Homer W. Hedden was appointed to secure the services of a competent attorney and institute a friendly suit. The law of 1872 compels school boards to hold competitions to secure plans for school buildings, and its provisions have been very aggravating to the profession. The Attorney General of California has ruled that the law has been rendered null and void by subsequent legislation and the members of the chapter are confident that they can secure such a decision in court.

The nomination of Mr. John C. Austin for a fellowship in the Institute in recognition of meritorious work was unanimously approved. The San Francisco and Southern California Chapters have united in nominating Mr. Octavius Morgan for a director of the American Institute of Architects. Mr. W. F. Rosenheim has been the representative of the Pacific Coast on the directorate, his term expiring the first of next year.

The legislative committee was instructed to confer with Mr. J. J. Backus, chief inspector of buildings, and urge that to change be made in the present city building ordinance governing the inspection of reinforced concrete work. Mr. Backus sometime ago asked the city council to repeal the present ordinance because he felt it was unsatisfactory in its operation.

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Texas Architects to Meet

The Texas State Association of Architects will hold their annual convention at Dallas, Texas, the latter part of October, date yet to be determined.

Washington Chapter A. I. A. Holds First Meeting

The first meeting of the fall season of the Washington State Chapter of the American Institute of Architects was opened Wednesday night with a dinner at the Seattle Athletic Club followed by a business meeting to which the guests of Charles H. Alden were ushered by the local chapter after being announced by the directors as the members as follows:

The meetings will continue on the first Wednesday of every month until summer.

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B. C. Society of Architects Hold Annual Meeting

At the annual general meeting of the B. C. Society of Architects, Vancouver Chapter of the society's rooms the following gentlemen were elected as the new executive and council for the ensuing year 1913-14:

Mr. C. J. Thompson, president.

Mr. W. O. Dodd, vice-president.

Mr. J. Drummond Deane, honorary secretary. Mr. Robert Lyon, honorary treasurer.

Council—Messrs. G. A. Duthie (past), Franklin Cross, C. B. Cowper, W. L. Gardiner, H. A. Hoard, W. T. S. Hoyt, P. L. Julian, J. G. Lichtig and A. D. Patmore.

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Home Furnishings.

By ROSALIE G. MENDEL.

Stint yourself as you think you should in other things, but don't economize on brightening the home. Gay furniture and cheerful decorations are a sight to rest and rejoice the father."—Charles Buxton.

An apt quotation is often better than an original thought, and the above advice is excellent for those who contemplate furnishing or refurnishing the old-year round home.

There is something elusive and feel rather than express between the words "home" and "house." Home in a real sense should have all the functionality which the architect can give simply, but is achieved by the governing influence of the home woman.

Webster defines "Home" as one's dwelling place, but different homes reflect the people who occupy them and it is the appreciation of beauty and the indefinable air about makes a home instead a "residence."

Of course, you must follow certain fundamental principles of home craft and be ever keenly alert to the necessity of true comfort and making the house livable.

Most people have to live with the same furniture a long time so simple, well constructed, trustworthy furniture is a good investment.

It is common knowledge that interest rest on the home decorations one can take into their selection for expression and suggestive harmony for those on exposure of themselves indicating good taste and careful choice ever keeping in view that furniture is not bought to be discarded for the future.

We can not all indulge in the possession of antiques but there are such fine reproductions that the acquisition is really a joy. If you love Colonial furniture have something of the Period—that of the pieces of one room will be in harmony.

The living room is the heart of the house and should be thoroughly cozy the idea of threadbare comfortable chairs and cushions overlooked could add to the effect. The "front room" garbed in luxury dust is a thing of the past. Parlors are more for parades now and are treated accordingly.

An open fireplace always gives an air of cheeriness to the room. Low bookcases filled with well-bound books on either side of the fireplace improve the appearance of the room. Growing ferns in handsome jardinieres can be placed so as to add a decorative effect.

Mulberry, soft tans, rose, and grays are good neutral backgrounds for the wall and the same shades predominate in the furnishings. This is the season for velvets, plushes and brocades and tapestries. There is a strong tendency to make the living room more luxurious, but that does not infer the acquisition of useless furniture. Elegance and comfort are shown in the over-stuffed furniture. Sunfast velvets are used for upholstery purposes with some of the chairs relieved with a bit of tapestry, but the harmony of color is maintained throughout.

The carpets are usually the strongest color note in the room. Chinese and Japanese effects are probably responsible for the use of lacquered furniture. Lace shades of fancy net take the place of former lace curtains. Overdrapes of soft materials with valances are used over the shades. If the rug is plain the hangings are figured; if figured the hangings are usually plain.

A convenient little table called the Washington Irving table is an acquisition to the library. This has an adjustable book stand which closes down so the table can be used for any purpose.

Flower stands have shelves underneath for magazines. The library tables are no longer placed in the center of the room, but wherever they look best. The furniture in a recently furnished home was after Chippendale, the coverings and draperies selected were of mulberry velvet. The high-backed chairs were covered to match. The rug was a beautiful specimen of an old Chinese rug in dull colors with Chinese characteristics in the border.

Though velours and heavy materials are used, linens, cretonnes, chintzes are used in the town house as well as the country home. The craze for Chinese and Chippendale effects can be found in these materials in beautiful soft colors. These materials come from the cheapest up to $3.00 a yard, and there is a wide variety to choose from. The sun-fast and washable fabrics are so often called for, that nearly all goods are guaranteed to have this quality. What a blessing to have nonfadeable wall papers, upholstery goods and hangings! "What shall I use for curtains?" is so frequently asked; fillet net is both durable and effective. As also are the plain nets, scrim, casement window materials and soft silks.

American people are so hospitable that with them the chief interest centers around the dining room, and for that reason it should be designed so as to foster the uttermost spirit of geniality and good cheer. The selection of the furniture is best if simply designed, but solid in its construction. Plain materials are best for window draperies in the dining room. Blue is always used to good advantage in both the simple as well as the most elaborate type of a dining room. There has been a radical departure in dining room furniture. Adams and Sheraton periods are still used, but there is a revival of the Queen Anne and William and Mary periods, not only in oak, but also in mahogany. A pleasing change has been made in the display of china and glass cabinets. The glittering show case with mirror back and glass shelves, sometimes glaringly enhanced with the suspension of electric lights, has been substituted by cabinets lined with dark soft silk entering into harmony with the general scheme of the room, and the glassware shows off to better advantage on the wooden shelves which replace the glass ones. Consoles are often substituted for sideboards. A dining room table which many will find convenient has an adjustable top which can be taken off at a moment's notice, so that the entire room can be used for other purposes.

A dining room of especial good taste was papered in Chinese paper with silver background designed in blue figures. The hangings were blue velour over plain pongee. A plain blue hand tuffed rug was used and Chinese Chippendale furniture. The centerpiece on the table was of old silver banded with blue. The walls were free of all dust-collecting and useless ornaments.

Another dining room in the William and Mary period was furnished in antique oak with inlay of ebony. The chairs were upholstered in Spanish leather and had handsome gilt etching on the backs. The rug was in dull rose colors, as also were the hangings.

In chamber furniture the Adams period predominates. Cane inserts on beds, bureaus and seat furniture are seen so often they are becoming commonplace. Dull finished American walnut in exact reproduction of old pieces is much in demand. The craze for antiques continues, but there are so many excellent reproductions that the new seems old to us. Bedroom furniture is usually in old oak, Circassian walnut, mahogany, birds-eye maple, enameled woods or painted furniture. Many bedroom suites in the Jacobean period in mahogany are noted. A new addition to the Jacobean bedroom pieces is the chaise-longue with adjustable back upholstered to match the color schemes in the room. We have come to the conclusion that wooden beds are as sanitary as metal ones and possibly of far more graceful lines. Formerly the salability of a bureau depended upon the size of the mirror, but as the new bureaus are exact reproductions of the old ones, the mirrors are very small. Just like the kind your great-grandmother used to use. Highboys and low-boys are used by some instead of chiffoniers, adding to the quaintness of the room. Much attention is paid to the handles of the bureaus and other articles, so instead of just ordinary wooden knobs they are in exact harmony with the rest of the furniture. Painted furniture is nothing new, for as early as 1750 the Dutch used painted furniture. Then the demand was so great that the dealers bought up all the sleighs, using the painted panels for cabinet work. Enameled furniture with delicate decorations and cane paneling is a happy inspiration in bedroom furnishings.

A bedroom set, consisting of bureau, bed, desk, sewing table, dressing table, chairs, chiffonier and table, was finished in gray enamel decorated with wreaths of old-fashioned delicate pink and blue flowers. This was used in a room which was papered in pale rose with a stenciled border to match the floral decoration. A two-tone plain rose-colored rug was used. Velvety cretonne with gay splashes of pink and blue flowers was combined with coarse mercerized thread on linen, and used for the hangings of bureau and bed covers, upholstered cushions, lamp shades and window seat. The curtains were baiste with insertions of lace and reached just to the sill. Of course you can carry out the dominant note of rose in soft silk instead of linen, if you prefer. Two new shades used in bedroom decoration are water green and apricot color.

With a little ingenuity the bedroom, more than any other room, at a small outlay, can be made most attractive.

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Floor Coverings.

Those things called dear are, when justly estimated, the cheapest. Beautiful forms and compositions are not made by chance, nor can they ever, in any material, be made at small expense.—Ruskin.

Rugs may come and rugs may go, but the oriental rug will never cease to be a source of luxurious home adorn-

ment. There is a special income pride in the possession of real rugs. So much interest centers in it. From whence did it come? What tribe originated the design? What strange scenes has it beheld in its many wanderings? What are the mystic secrets woven in its harmonious colors?

The oriental rug is no longer regarded as a luxury, but rather as an absolute necessity in the home. It is unequaled for its durability and color conceptions. It is possible to obtain rugs cheaper than a few years ago. The khiva is an ideal rug for the library or hall in the average size from 6x9 to 8x10 feet. The predominating color is a rich red, which adds a richness to the furniture. Saruk rugs come in rooms requiring hard service.

The rugs of China and Tibet are more sought after than ever and may be purchased at nearly the same amount as a good Persian or Turkish rug. One of the most valuable Chinese rugs in the world is in the Morgan collection and cost $30,000. The Chinese rugs are usually rich in fancy and strong in coloring.

The modern Wilton rug is a good substitute for the oriental. Popular taste inclines toward the one color rug with shaded border and harmonizing with the general color scheme.

Do not buy conspicuous colors in floor covering, as you will tire of them quickly. There is an ever increasing demand for blues, browns, mulberry and mole, though since you can have your carpets dyed to order any shade you select can be easily obtained.

Austrian, English and Dutch hand-tufted rugs are excellent in value, two-toned effects, giving warmth to the room, and are in good taste.

I saw one of the new carpets the other day which had a black background with conventional floral effect with an elaborate border. This carpet was $300 a yard and reminded me of the old fashioned "best parlor carpet" of long ago.

Plain rugs or Persian mixtures are suitable for the dining room.

There are Axminster or genuine Smyrna rugs in a variety of sizes and styles if one wishes a moderate priced rug.

Seamless Chenille rugs are all wool and noted for their rich and luxurious softness. Then here are the English and American, Scotch wool art rugs in new color combinations.

Plain two-tone or small pattern rugs are best for bedrooms. Small rugs are more sanitary for they can be so easily cleaned.

Each season there are displayed grass and other fiber rugs, which are good for all year round wear for nursery or bedroom. The newest are in ecru, soft grey and browns. They show more pliability each season.

"Rag" seems a very ordinary name for some of the artistic hand braided rugs which are full of good color. The rag rugs fit in well with the Colonial decorative scheme so much in evidence now. Rag rugs render good service because they are reversible and can be washed. "Sanitary" is a word we hear more and more in these days of enlightenment and we fully realize that the artistic rugs not need to conflict with modern sanitary ideas in home furnishings. Cheap rugs, cheap in material, are dear at any price, but if one watches closely he can often get good rugs at low prices.

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Douglas fir, according to the information collected by the forest service, is the principal wood exported from this country. It is said to be the favorite wood among insular manufacturers for flooring, ceiling, siding, cornice, shelving, finish, and boat work.

Conditions Governing the Design of Solano

By MARK DANIELS,
(Landscape Engineer.)

The expression "Town Planning" in the West has a meaning somewhat different from that phrase as commonly used in the eastern part of the United States and in Europe. The growth in the population of urban and suburban districts in the more densely populated communities is very much less rapid in proportion to that population than it is in the West, and the problems involved in town planning in these more densely populated localities are more in the way of the planning of city extensions and suburban residential districts, or in the re-planning of old and densely populated cities for the purpose of facilitating traffic and enhancing picturesqueness.

In the West it is not an unusual thing for a town to start its formation about some salient point in traffic lines and grow with a rapidity that within a comparatively few years brings the embryonic village into the category of towns and small cities. The problem, therefore, must be approached from a very different angle when planning a western town, and very often calls for a solution that at first flush appears to be little short of the fanciful imagination of an energetic real estate booster.

The first step to be taken in the development of a plan of a new town from its incipiency should be the careful consideration of the forces which are to be most active and most potent in the development of that city's population. The classification of cities according to the dominating influences in their growth gives us the following types: Political, social, commercial and manufacturing. Cities created through the exercise of social forces might be broken into two classifications, such as strictly social, and educational. It is hardly necessary at this place to give examples, as such are numerous and obvious. Suffice it to say that in the design of Solano it was evident that the great force creating and instituting a town in this location was commerce.

With the development of a harbor capable of accommodating sixteen to twenty vessels of deep draught, in a location that would make it the furthest inland harbor in an extremely fertile productive agricultural area, it became at once evident that Solano, if properly developed, would become a commercial center of considerable importance. Many shiploads of material in bulk would undoubtedly be discharged in the harbor of Solano, there to be broken into smaller quantities and distributed through out this large area. As the site is situated at the terminal of a railroad and at an inland harbor close to a large and productive area for raw material, the inducements to manufacturers of a certain character also would be great, so it was concluded that Solano would eventually be primarily a commercial center, and secondarily, a manufacturing and packing center. The problem then was to lay out the town in such a manner as to accommodate shipping and manufacturing industries and the population necessary to carry on these industries, while at the same time developing the esthetic and beautiful elements to the highest possible practicable degree.

The topographical and geological conditions determined the location of the harbor in such a place that it was only possible to build the town either to the north or west. The Oakland, Antioch & Eastern Railway operates on a line that is about three-quarters of a mile east of the center. The Sacramento Valley Electric Railway is projected along a line that approaches the harbor from the south and east. Since the greater portion of business traffic would eventually pass from railroad

to harbor, the best position for a town, for the purpose of minimizing travel, lay between the Oakland, Antioch Railroad and the harbor line. In fact the direction of traffic from the Oakland, Antioch Railroad to the harbor largely determined the main east and west axis. The dirt road travel which will eventually come over the Oakland, Antioch Railroad bridge at Chipps Island determined the direction of the north and south axis and located, by its intersection with the east and west axis, the civic center of the town. From this civic center the location of which had now become restricted to a small area, radiating arteries were planned to the harbor, the manufacturing district and the residential district. It was found, after some considerable manipulating, that it was possible to satisfy these conditions and still locate the civic center at the origin of symmetry of four hills, each about thirty-five feet higher than the elevation of the civic center and in such a manner that the continuation of the radiating arteries from the manufacturing and other centers to the civic center passed through these hills. From this was developed the main portion of the plan which comprises a civic center from which radiates eight arteries, four of which pass over the crests of these hills, the hills forming an amphitheater about the civic center. It is planned that public buildings, such as library, school, post office, etc., shall be built on the tops of these hills, all looking down wide avenues upon the civic center.

The four hills are so situated that a road connecting them forms three sides of an octagon, and this road is planned as a mall one hundred feet in width, with a double parking strip. About each building on the hills is planned a park, each park varying from one to two acres in extent. Surrounding the business and semi-business and residence districts, has been planned a hundred foot driveway similar in its function to the Ringstrasse in Vienna, which will be planned and parked to a double roadway. This avenue called "Circular Drive," serves both as a gathering artery and is a secondary perimeter of distribution, connecting the surrounding and outlying parks. From the railway station on the Oakland, Antioch & Eastern to the Circular Drive, has been planned a panhandle one hundred twenty feet in width parked to a triple driveway and intersecting Circular Drive at a secondary point of distribution comprising eight radiating arteries.

In order that the residence and business districts should be sufficiently screened and protected from the noise and other disagreeable attributes of the wholesale, manufacturing and shipping districts, a large park, comprising some hundred and fifty acres was located to the west of the town. The lower extension of this park is six hundred feet in width and lies between the wholesale district and the business district and is connected with the harbor by a reservation for a small-craft harbor and park. The projected Sacramento Valley Electric Railroad skirts this park for the last mile of its line to the harbor and lies between this main park and a park strip on the main avenue along the railroad line. By this means it was possible to bring this line into the heart of the town with the minimum number of crossings, while, providing a charming outlook from the car windows throughout the entire distance traversed in the town limits.

The whole plan has been studied and worked out with the object, as stated before, of creating as much charm as possible, while presenting routes for travel in a direct line from one center to another. It is seldom possible to plan a straight line between all centers without consuming too much area with the streets and the most unimportant routes of travel or the routes of travel which are employed by those not in the need of haste have been those the restriction of which were sacrificed to economy and appearance. For example, the arteries connecting various portions of the residence district, or from one residential center to another, are curved, or laid with a change in direction, whilst the arteries connecting the civic center with public buildings, manufacturing, wholesale and shopping districts, are straight or as near straight as possible.

Streets were planned with varying widths depending upon the purposes to which they will be put. It is not, however, the street having the most traffic which should be planned the widest. The panhandle from the railroad station to the Circular Drive is one hundred and twenty feet wide, but its width is largely for the purposes of beauty. The Circular Drive is 100 feet in width with a single park strip and planned as a pleasure drive. The main diagonals are eighty feet in width with no park strips and of a cross-section that will accommodate a very large quantity of vehicular traffic. The mall connecting the four centers encircling the civic center, is one hundred feet in width with a double park strip and of a cross-section designed to enhance the perspective from one center to another. All streets in the business section are sixty feet in width with the exception of the main street which is eighty feet. The streets in the closer in residence districts are fifty feet in width and the streets in the more remote residence districts are forty.

The plan in general is the Gridiron System with the superimposed diagonals for the business and semi-business and semi-residential areas with the strictly residential areas planned in curved lines and some superimposed diagonals.

It may appear, as before stated, that, upon a superficial examination, the plan of Solano has been developed with an unjustifiable elaborateness, but since it costs no more to plan a city well than to plan it poorly, and since there are such strong and logical reasons for anticipating a marked and rapid growth for a town in this location, such a criticism would hardly seem justifiable.

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Second-Story Bungalow Apartments

A colony of one-story bungalows built about a court on the roof of a block of stores is a new idea in apartment houses which has recently been realized in Long Beach, Cal. From the street the bungalow apartment building looks like an ordinary brick business block with shops below and flats on the second floor. But the stairway from the street, instead of leading to a second story, takes one to a broad, sunny court on the roof of the shops. Down the center of the court is a pergola with flower boxes beneath it, and around the four sides are the low gables of seventeen one-story Swiss-chalet bungalows. Flower boxes under the windows, and plaster walls trimmed with dark wood make them look like a row of bungalows on the street. In all there are two (2) room, four (3) room, and eleven four-room bungalow apartments about the court. Each pair of bungalows has a common sheltered porch, recessed so that the entrance doors open into the living rooms. Their kitchens and dining rooms face the court and their living and sleeping rooms overlook the street. Each has its own bathroom and plenty of closet room. The common laundry is not in the basement, but on the roof of one of the bungalows, and clothes are hung out on the roofs of the kitchens unseen from the street below. The floor of the court is covered with heavy deck roofing drained by a gutter in the center, and garbage is taken care of in boxes with ventilating pipes leading through the roof.

Weber Memorial, Stockton, Cal.

Conditions for All Contestants

Notice is hereby given that the Weber Memorial Committee of the City of Stockton, invites architects to submit competitive designs for a Concert Pavilion to be erected as a memorial to Captain C. M. Weber, the founder of Stockton, and this competition shall be subject to the terms and conditions herein set forth.

The author of the design awarded first place in the competition will receive a cash prize of Fifty Dollars ($50.00), and will be appointed architect of the structure, provided, that in the judgment of the jury of award the merit of the designs submitted justifies such award. The compensation for full architectural services to be rendered by the architect awarded first prize shall be determined in accordance with paragraph one (1) of the schedule of proper minimum charges adopted by the American Institute of Architects.

The competition is open to all architects of the state.

The committee reserves the right to retain the drawings awarded first prize for such a time as may be necessary to secure sufficient funds to complete the structure, and shall be entitled to publish said drawings in pamphlet form, newspapers, magazines, etc. Drawings to remain the property of the author, however, and to be returned to him on completion of the project.

The structure is to be situated at or near the center of Hunter Square and is intended for band concerts, public speaking, etc. It shall contain approximately 750 square feet of floor space and be provided with a store room for furniture, etc.; also public lavatories—male and female—completely equipped with the latest sanitary devices.

An appropriate setting of lawn and shrubbery, also an adequate and decorative lighting scheme shall be included in the design. No restrictions are placed on the designer as to the material to be used in construction, except that it shall be fireproof. Economy of cost is one of the elements of importance in this competition and in awarding the prize, consideration will be given to simplicity in design, and convenience in arrangement.

Hunter Square is rectangular in shape—extends North and South 303 feet, facing Main street on the South and Weber avenue on the North. In width it is 152 feet between curbs. The County Court House, surrounded by lawn and palms, occupies the entire Eastern frontage, and an unbroken line of stores and office buildings bounds it on the West. The square is asphaltum paved and approximately level.

Two drawings will be required as follows:

One block plan drawn to a scale of 1/8 inch to one foot rendered in India ink

One elevation drawn to a scale of 1/2 inch to one foot rendered in any medium suitable for reproduction. In case one elevation is not sufficient to properly express the design, a second elevation—in pencil—may be submitted.

Each design may be accompanied by a brief typewritten description, consisting of a memorandum specification and such other information as the author may find desirable in elucidating his drawings.

No competitor shall submit more than one design.

All drawings together with the accompanying papers must be delivered at the office of the secretary, Mr. J. P. Irish, Jr., Chamber of Commerce, Weber avenue, Stockton, Cal., on or before November 1, 1913, at 5 o'clock.

Each design must be accompanied by an opaque sealed envelope containing the author's name and address. Neither the drawings nor any papers accompanying them, nor any marks upon the packages shall in any manner, directly or indirectly, disclose the identity of the competitor. All drawings and other papers accompanying each design must be securely enclosed in one flat, sealed package plainly marked: "Weber Memorial Competition."

Plans received after the hour last named above, cannot be considered and will be held unopened subject to call.

A violation of any of the above conditions by any competitor will exclude his design from the competition.

For further information address John P. Irish, Jr., Secretary Chamber of Commerce, Stockton, Cal.

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Architectural Water Color

E. J. Baum, recently from New York City, has opened a studio and is prepared to do all classes of architectural renderings. Address 1001 Post street. Phone Franklin 5501.

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Trade Notes

Carl Parker, sales manager Geo. H. Tay Co., has returned from an extended eastern trip.

Architect W. J. Kratz of Portland is a San Francisco visitor.

Architect Charles S. Kaiser with offices in Mechanics Institute Building, has returned from an extensive eastern trip.

School Architect, F. V. Naramore, Portland, Oregon, has moved his office from the Tilford Building to room 303, County Building.

Architect A. M. Warner, Los Angeles, has moved his office from 739 Temple street to 229 Stimson Building.

Architect A. D. Gendren has opened an office at Astoria, Oregon. Mr. Gendren is a recent arrival from Massachusetts.

Architect Clyde Chenev, Los Angeles, has moved his office from 402 Grant Building to room 223 same building.

Architects Woodruff and Constable Tacoma, Washington, have moved from the Fidelity Building to larger offices in the Tacoma Building.

Architect H. J. Kraner, Los Angeles, has moved his office from Second and Wilson arcade to new quarters at 441 Citizens National Bank Building.

Thorgils Thoresen, Los Angeles, has opened an architectural office at 425 Los Angeles Investment Building.

Architect L. V. Cook, Pasadena, has moved his office from 100 East Colorado street to room 505 Braley Building.

Architect A. F. Rosenheim, Los Angeles, is on a two-weeks business trip to Chicago.

Architect Walter S. Keller, of San Diego, has been elected a member of the Southern California Chapter of the American Institute of Architects.

Architect Charles W. Dean has opened his Portland office in the Worcester Building and will remain located in Cleveland, Ohio.

Thomas Schultz with Thomas and Schneider, 926 Howard street, manufacturers of art glass, has returned from a business trip to southern California.

Architects Shea & Lofquist announce the removal of their offices in the Bank of Italy Building to the Bankers Investment Building, 742 Market street. The firm has taken a suite of offices on the fourth floor.

W. P. Fuller, Jr., manager of the Varnish Department of W. P. Fuller & Company, has returned from a month's trip visiting their thirteen branches and holding conventions with the salesmen of the different branches.

Architects Perry and Fowler, Vancouver, B. C., have moved their offices from 320 Pacific Building to 421 and 422 same building.

Architect Harry H. James, for many years located in Spokane, Washington, has moved to Seattle and opened an office in the Crary Building.

Architect Davis S. Castle, formerly of the firm of M. L. Waller & Co., architects, Fort Worth, Texas, has opened an office in the Goldbaum Building, Tucson, Arizona.

Architect A. F. Heide, 223-5 Spring street, Seattle, has been selected as architect to design the Washington buildings at the San Francisco and San Diego Expositions. Mr. Heide designed the Washington building at both the St. Louis and Portland Expositions.

Edward T. Foulkes and Chester J. Hogue, architects of Portland, have been selected to design Oregon's state building at the Pacific-Panama Exposition. The structure is to be built of Oregon logs, along the lines of the forestry buildings at the Lewis and Clark fair and Alaska-Yukon-Pacific exposition.

The floor tile to be used on the Pittock block and the Northwestern Bank building require the delivery of 400,000 pieces of the material. The contract for supplying this large quantity of tile has been awarded to the Columbia Brick Works, 256 Hawthorne avenue, Portland, Oregon.

Mohrlite fixtures are being installed in the Albert Pike Memorial on Geary street. This is without doubt one of the handsomest fixtures on the Pacific Coast.

C. F. W. Lundberg and Frank C. Mahon, Tacoma, Washington, have formed a co-partnership for the practice of architecture under the firm name of Lundberg & Mahon, offices, suite 310 Provident Building.

Architect A. L. Volk, Los Angeles, has moved his office from the Union Oil Building to 424 Stimson Building, the present office of his father, L. B. Volk Company, which will be used jointly.

The Steiger Terra Cotta and Pottery Works will furnish the architectural terra cotta for the Mary Elizabeth Inn on Bush street, west of Jones, and the new Physicians Building to be erected on Post street.

H. A. Rathborne, secretary of the Van Emon Elevator Company, is at present looking after the company's interests at Portland, Oregon. Geo. A. Russell, who for some years has acted as Oregon sales manager, is no longer associated with the company.

Mr. S. B. Cooke, with headquarters at 422 Failing Building, Portland, Oregon, was a recent visitor in San Francisco on his way to Los Angeles. Mr. Cooke has the agency for the United States and Canada for the Universal Bed Co., manufacturers of a disappearing bed.

Architect Otto H. Neher, of the firm of Neher & Skilling, Los Angeles, with offices in the Garland Building, is on an extended northern trip visiting British Columbia, Seattle, Tacoma, Portland and on his return will spend some time in San Francisco. This firm recently moved from the Pacific Electric Building.

H. W. Finch, representing the Kohler Co., of Kohler, Wisconsin, on the Pacific Coast, with headquarters at 1001-03 Monadnock Building, San Francisco, has returned from a successful business trip to the Northwest.

Architects Barnett, Haynes and Barnett, Los Angeles, have moved from the Wright and Callender Building to suite 1215 the new Brockman Building, on Seventh street, the building for which they were the architects, this being a branch office of the firm, the main office being in St. Louis, Missouri.

The $80,000 Huntington Park Union High School for which G. W. Eldridge was architect is being rushed to its fullest extent. This building will be two stories and basement with brick and artificial stone exterior. Mr. Eldridge is of the firm Cheseborough & Eldridge, Salt Lake, who were architects on the new Salt Lake High School and comes to Los Angeles with a record of excellent architectural ability.

Fred W. Eastman, president of the Oregon Dennison Block Co., with headquarters in Portland, is a visitor in San Francisco. Mr. Eastman had some difficulty in locating all his baggage on his arrival in the city, a fine walking stick having been mislaid caused him considerable worry. But now Fred has the usual smile and the walking stick.

Mr. E. D. Weary of Weary and Alford Co., with headquarters in Chicago, passed through San Francisco on his way home. Mr. Weary's firm have just finished the interior of the First National Bank at Los Angeles, one of the finest interior bank jobs on this coast.

Architect Elmer Grey, Los Angeles, is on an extensive European tour. He will sail direct to England and will tour France, Belgium, Holland, Germany, Italy and Sicily, the return voyage being through the Mediterranean countries. Mr. Grey expects to remain away for three months.

Architect R. D. Farquhar, 1123 Van Nuys Building, Los Angeles, has returned from a trip through Italy, Switzerland, France, and made some stay in London. Mr. Farquhar says that evidences of the French school are very prominent in the new buildings of London, and a decided change from the old type. This French architecture is best displayed in the Royal Automobile Club of London, but that all buildings bear some trace of the French architecture, while others are decidedly so.

Mr. Mark Daniels, whose article on Solano appears elsewhere in this issue, left last month for Cambridge, Massachusetts, where he will spend several weeks in advanced investigation of the subject of landscape architecture and town planning. His principal work at Harvard will be planning large estates and gardens and writing, for publication in the department at Harvard with joint credit, some work on city planning.

After his work at Harvard is completed, Mr. Daniels will make an extensive tour of the Atlantic Coast from Quebec to Key West, Florida, making careful studies of private estates and public parks in all of the important cities, at the same time attending to some landscape work which he is doing in Florida. He will return by the way of New Orleans, near which city he is engaged in some city planning work in connection with a very large project.

Mr. Daniels has contributed materially to the beautifying of the districts surrounding the Bay. Among his more prominent works are Forest Hill, Thousand Oaks, the Estate of F. W. Sharon, plans for the development of the properties of the Spring Valley Water Company, and Burlingame Hills.

CALIFORNIA

Apartment House—San Francisco. Architect C. O. Clarell, Phelan Building, is preparing plans for a three story frame apartment house, to be erected on Sacramento street near Divisadero, to cost $12,000.

Apartment House—San Francisco. Architect Leon M. Gardner, Phelan Building, has prepared plans for a three story brick and steel apartment house, to be erected for Cannery & Denton on Hyde street near Post. Building will cost about $25,000.

Apartment House—Oakland. Architect C. M. Barron, Ahern Building, has completed plans for a three story brick and frame apartment house, to be erected on Harrison street, to cost approximately $75,000.

Office Building—Sacramento. Architect Clarence C. Cuff has prepared plans for a twenty-story office building for the Western Securities Co., to be erected on J street between Eighth and Twelfth streets. The structure when completed will cost about $1,200,000.

Residences—San Francisco. Architect Kenneth MacDonald, Jr., Holbrook Building, is preparing plans for two large city residences, which are to be erected on the property of Louis Sloss, Pacific avenue near Franklin street. Both buildings will be of steel, concrete and stone and cost about $150,000.

School Building—Oakland. Architect John J. Donovan, Security Bank Building, has prepared plans for the new Lockwood School, which is to be erected on Bay Farm Island, street. The building will be of reinforced concrete, one story and basement, and will cost about $70,000.

Flat Building—San Francisco. Architects Welch & Cary, Mercantile National Bank Building, San Francisco, have prepared plans for a three story frame flat building, to be erected for Y. Palladini on Filbert street near Stockton, estimated cost, $11,000.

Residence—San Francisco. Architect Edward T. Foulkes, Crocker Building, is preparing plans for a high class city residence, to be erected on Eighteenth avenue near Presidio avenue, to cost $12,000.

Residence—San Francisco. Architect Henry C. Smith, Humboldt Bank Building, has prepared plans for a two-story English style residence for E. F. Ball on Ashbury street, to cost about $10,000.

Hall of Records—Merced. Architect C. A. Russell, Humboldt Bank Building, San Francisco, has prepared plans for a one story with full basement and mezzanine floor. The building will be erected of reinforced concrete and cost about $35,000.

Residence—Berkeley. Architect John Hudson Thomas, First National Bank Building, Berkeley, has prepared plans for a two-story frame dwelling, which is to be erected at Bushnell place, Berkeley, for Miss L. G. Rosler.

Library Building—Fresno. Architects Swartz, Hamilton & Swartz have prepared working drawings for a $20,000 brick and concrete library building, which is to be erected in Fresno with funds received from the Carnegie Library Association.

Hotel Building—San Francisco. Architect G. Albert Lansburgh, 709 Mission street, has prepared plans for a six story and basement Class C building, which is to be erected for A. T. Eisenberg at an estimated cost of $65,000.

Residences—San Francisco. Architect H. E. Young, 251 Kearny street, has prepared plans for two bungalow city dwellings, to be erected for Matthew A. Liddle on Sacramento avenue north of Lake street. Each house will cost about $7,000.

Auto Repair Shops—San Francisco. Architect August Sperlin has prepared plans for a one story and basement reinforced concrete building, designed for an auto repair shop, to be erected on Post street near Polk, to cost $15,000.

Commercial Building—San Francisco. Architect Frederick H. Meyer, Banker's Investment Building, has plans prepared for an eight-story commercial building, to be erected on Sutter and Powell streets for Trawlerbaw & Perkins, to cost $250,000.

Residence—Menlo Park. Architect Charles Peter Weeks, Mutual Bank Building, San Francisco, has prepared plans for a two-story frame residence, for John B. Leonard, building cost over $7,000.

Residence—Modesto. Architect Frank T. Mead, Stockton, has prepared plans for a two and a half story frame residence for Mrs. J. F. Dalton, to cost about $4,500.

Apartments—Santa Monica. Architect Albert S. Martin, Hibbard Building, Los Angeles, has been commissioned to prepare plans for a three-story and basement brick store and apartment house, to be erected on Fourth avenue, Santa Monica, for Martin & Hibbard.

Garage, Livery—Inyokern. Architect E. L. Hopkins, Hollingsworth Building, Los Angeles, is preparing plans for a one-story and basement reinforced concrete garage building, to be erected at Inyokern, to cost about $10,000.

Hotel Building—Los Angeles. Architects Morgan, Walls & Morgan, 717 Wright & Callender Building, are preparing plans for a class A hotel and hotel building, to be erected on Main and Fourth streets, for Lord Grant, of San Francisco, to cost about $400,000.

Residences—Pasadena. Architect R. D. Johnson, Story building, has prepared plans for a concrete fireproof residence, to be erected on Arlington avenue, between Third and Fourth streets, for Mr. H. Jarvis.

Colonial Church—Los Angeles. St. Vincent's Parish will soon let the contract for a new church on Vermont avenue, between Melrose and Fountain avenues. Plans prepared by Architect John C. Austin and Ferriman, room 50 Laughlin Park Building, Los Angeles.

Hotel Building—Los Angeles. Architect Walter Webster has been commissioned to prepare plans for a hotel apartment and transient business, to be erected on Third and Figueroa streets, to cost about $1,000,000.

Hotel Building—Los Angeles. Architects Train & Williams have been commissioned to prepare plans for an three-story addition to the Hotel J. Gamble, to be erected on Spring street between 8th and 9th streets.

Flats for sale Reading. Architects Morgan & Walls, Hibbard Building, Los Angeles, has prepared plans for a concrete brick and tile flat building, 100x74 feet.

Residences—Los Angeles. Architect Robert H. Orr, Van Nuys Building, has prepared plans for a residence on Third street, between Lucas and Rampart streets, for Mr. Ewell.

Residence—Los Angeles. Architect Morgan, Walls & Morgan, Van Nuys Building, are preparing plans for a residence for Chas. A. Hamilton, to be erected on Harvard and Bonsall way streets, for Abraham Hare, of San Francisco.

Office Building—Los Angeles. Architect J. Martin Hunter & W. J. Dodd, Story Building, are preparing plans for a fourteen story steel frame office building, to be erected at Spring and Mountjoy streets, San Francisco, for the Owner Estate. The building will contain about 100 offices.

Office Building—San Bernardino. Architects L. C. Austin & W. C. Pennell, Wright & Callender Building, Los Angeles, have completed plans for the San Bernardino Crown Hill School District for the erection of a one story reinforced concrete general office building.

OREGON

State Building—Portland. Architect Arthur H. Dodd is preparing plans for a state building, to be erected on Taylors and Morrison streets, for J. C. Cobb.

Warehouse—Portland. Architects Earl Sizemore & Son, Pittock Block, have prepared plans for a brick warehouse, to cost about $60,000 for the Pearson Park Company.

Armory Building—Roseburg. State Architect W. C. Knighton, Salem, has let a labor bid for a reinforced concrete armory building, to cost about $30,000.

Bank Building—Beaverton. Architects Claussen & Claussen, Portland, have drawn contract and is preparing plans for a one-story brick and stone banking and office building, to cost about $15,000.

City Hall—Pilot Rock. The City Council is considering plans to be prepared for a new city hall building, to cost about $15,000. The structure will also be used as a gymnasium.

City Hall—Rainier. Architect H. C. Bell, Portland, is preparing plans for a two-story and basement brick and stone city hall building, to cost about $7,000. (A. T. Portland).

School Building—Bend. The School District of Bend has called for bids until July 1st for one story reinforced concrete and brick school house, to cost about $25,000.

Factory Building—Milwaukie. Architect W. C. Crandall has prepared plans for a one-story reinforced concrete factory building, to cost about $25,000, for the Dorris Shoe Mfg. Co.

Hotel Building—Canyon. Architect F. S. Lamb, of Portland, has prepared plans for a two story brick building, to be used as a hotel and store.

Hotel Building—Portland. Architect Edgar E. Trullinger, has prepared plans for Carpenter Lake Hotel Building, to be erected on S. E. Powers, to be erected on the corner of Stanton and Union streets, to cost $10,000.

Warehouse—Astoria. Architect O. D. Wold & Co., have prepared plans for a reinforced concrete warehouse, to be erected on Astoria, to cost $40,000.

Warehouse—Portland. Architect A. E. Doyle has prepared plans for a reinforced concrete warehouse, to cost about $20,000.

Lodge Building—Portland. The East Side Camp, Woodmen of the World, contemplate the erection of a structure 100x200 feet in dimensions, several stories high, to cost $250,000.

High School Building—Baker. The School Board is contemplating negotiations for the purchase of a square block of business property to be used for a high school site.

Hotel Building—North Bend. At a recent meeting of the North Bend Chamber of Commerce steps were taken to secure the erection of a six-story brick hotel, to cost $100,000.

Y. M. C. A. Building—Eugene. A movement has been started to raise $20,000 for the purpose of constructing a Y. M. C. A. building in this city.

Business Block—Corvallis. Architect A. C. Jenkins, Salem, has prepared plans for a story business block for Wells & Foster.

Hotel and Store Building—Portland. Architect A. C. Ewart has prepared plans for a three-story brick building, to be erected at Sixth and Irving streets for J. M. James, to cost about $20,000.

Catholic Church—McMinnville. Plans are on foot by the local Catholics to erect a $10,000 church edifice here next year, to replace the present frame structure.

WASHINGTON

Factory—Tacoma. Work will start at once by the North Western Woodware Company on its $100,000 plant.

School Building—South Bend. Architect Watson Vernon, Aberdeen, Wash., has prepared plans for a three-story reinforced concrete school building.

City Buildings—Seattle. City Architect Daniel Huntington has prepared plans for the construction of the car barns and administration quarters for the Seattle Municipal Railway, to cost $50,000.

Factory Building—Edmonds. The Pacific Ramie Manufacturing Company, Seattle, will erect a one-story, 163x268 feet, fireproof factory building for the manufacture of ramie textiles at Edmonds. The building will cost about $150,000.

Business Block—Aberdeen. Architect W. R. Whiteside has prepared plans for a three-story building, to cost $15,000.

Residence—Seattle. Architect U. Grant Fay, Central Building, has prepared plans for a two and a half story residence for N. B. Beck, to cost $10,000.

Residence—Seattle. Architects Bebb & Mendel, Denny Building, have prepared plans for a two-story, 61x149 feet, brick and reinforced concrete residence for W. E. Boring, to be erected at the Highlands and cost $150,000.

Lodge Building—Spokane. The Knights of Pythias have decided to proceed at once with the construction of their lodge building.

Church Building—Gig Harbor. Architect C. Frank Mahon, Provident Building, Tacoma, has prepared plans for a Catholic church building, to cost $5,000.

Church Building—Walla Walla. Architects Beezer Bros., Northern Building, Seattle, have prepared plans for a brick and stone church, to be erected at Walla Walla for the First Congregational Church at a cost of $65,000.

City Hospital—Seattle. City Architect Daniel Huntington has prepared plans for a two-story $40,000 hospital building in connection with the Municipal Sanatorium project at Richmond Highlands.

Parish House—Tacoma. Architect A. Woodroofe, Tacoma Building, is preparing plans for a tile parish house for the Church of the Holy Communion at a cost of about $4,000.

Fraternity House—Seattle. Architect Harlan Thomas, Eilers Building, is completing plans for a two-story frame clubhouse building for the Delta Kappa Epsilon of the Washington University. The building will cost about $20,000.

Apartment House—Seattle. Architect Robert E. Knipe, Henry Building, is preparing plans for a three story and basement, 42x114 feet, brick veneer apartment house, to cost about $37,000.

Store Building—Seattle. Architect John Graham, Lyon Building, has been commissioned to prepare plans for a one story, 72x116 feet, store building for Harry Krutz, to cost about $20,000.

Residence—Seattle. Architects Huntington & Loveless, Colman Building, have prepared plans for a one and a half story residence for J. V. C. Kellon on Federal avenue, to cost $4,000.

Theatre Building—Seattle. Architect B. Marcus Priteca, Empire Building, will soon have plans prepared for the four-story reinforced concrete Pantages Theatre and office building, to cost $250,000. Mr. Priteca is now taking bids for carpets and draperies which will be used in the Pantages $400,000 theatre at Winnipeg.

College Building—Spokane. President Donald McKay of the Spokane University announces the removal of the school to Spokane from Tacoma. Many of the details have been donated and about $500,000 will be spent on the new building.

Court House and City Hall—Newport. Bonds for the sum of $15,000 will be voted for constructing a city hall.

Fair Buildings—Architect A. F. Heide, 223 Spring street, has been selected as architect to design the Washington buildings at the San Francisco and San Diego Expositions. About $100,000 will be expended in building constructions.

BRITISH COLUMBIA

Vancouver—Plans for the proposed immigration building, estimated cost $400,000, have been prepared by the Dominion Department Draughtsman. The building will be of reinforced concrete and steel, with concrete floors. It will be 220 feet long and will consist of a central portion of five stories in height, with wings on either side four stories high. The roof is to be of asbestos tiling with copper ridge.

Apartment House—Vancouver. Architects Helyer & Archer, Dominion Building, are preparing plans for a seven-story apartment building, to be built of brick and steel, to cost about $70,000.

Residence—Vancouver. Architects McClure & Fox have prepared plans for a palatial residence for A. E. Tulk, to cost about $85,000.

Hotel Building—Vancouver. Architects Parr, McKenzie & Day have prepared plans for a modern brick hotel to be erected on the corner of Pender and Main streets.

Apartment House—Vancouver. Architects Stewart & White have drawn plans for a two-story and basement apartment building to be erected on Broadway, to cost about $17,000.

Sub-Post Office—Vancouver. Architect A. Campbell Hope, 603 Hastings street West, has prepared plans for the new sub-post office building, to be erected at Mount Pleasant, to cost about $100,000.

Court House Addition—New Westminster. Architects Gardner & Mercer have prepared plans for the new addition to the court house, which will cost about $30,000.

Store Building—Victoria. Architects Burke, Horwood & White have prepared plans for the new Hudson Bay store, to be erected in Victoria, to cost about $600,000.

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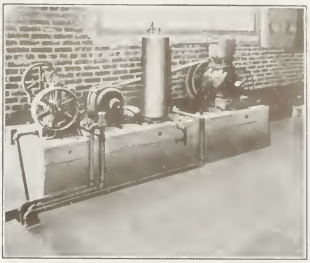

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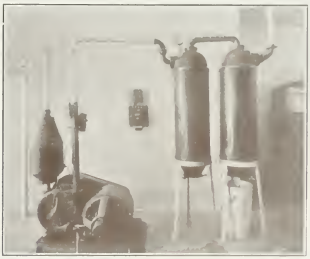

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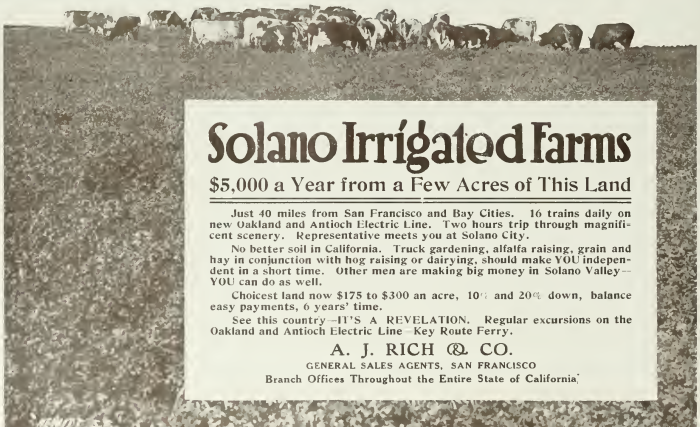

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SAN FRANCISCO
CALIFORNIA

VOLUME SIX
NUMBER TWO

NOVEMBER, 1913

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The Pacific Coast Architect

VOLUME VI — SAN FRANCISCO, CALIFORNIA, NOVEMBER, 1913 — NUMBER 2

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ADVERTISING RATES ON APPLICATION — TEL. DOUGLAS 3424

Current Comment

Elevators were used in the Imperial Palace at Rome 2,000 years ago, archaeologists believe. The kind of power used is not known.

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Moral: Advertising is the greatest time saver trade has ever known. If you have no time to save, and don't want to save it anyhow, don't advertise.

✧ ✧ ✧

A cement-manufacturing concern has been experimenting to ascertain whether or not it is possible to transport cement in bulk, like sand or gravel. A truck load of cement was recently sent out without packing of any kind, the interior of the truck body being first lined with water-proof paper. The truck arrived at its destination with absolutely no signs of leakage.

✧ ✧ ✧

The San Francisco Chronicle daily publishes a list of the principal episodes of the corresponding day twenty-five years ago. In a recent issue the following article appeared, and it is an interesting side light on the history of the San Francisco Chapter of the American Institute of Architects. It shows that the militant spirit within the chapter today is the same lusty infant that was alive and kicking twenty-five years ago:

"The City Hall Commissioners received a voluminous report from the San Francisco Chapter of the American Institute of Architects on the proposed style and construction of the tower for the new City Hall. The most important feature of the report was the advocacy of a circular tower in preference to a square tower, the style that had been approved.

The New Masonic Temple.

By B. J. S. CAHILL

The Masonic Temple recently completed, on Van Ness avenue near Market street, is a remarkable building from many points of view. The sum total of these creates in the mind an effect of protest, of novelty, of reaction, that one associates with any achievement that marks an epoch. As one battle may change the course of history, so one building may deflect the course of architecture. This is meant, obviously, in a relative and a local sense. In modern America one does not look for developments in the fundamentals of style, but one does find revivals in its accidentals. The very word style is at once a definition and an explanation on this point. It means the manner of building identified with a past epoch. It also means the manner or the mode of the moment. The designer who is sensitive to this ever changing spirit, who is not only abreast but a little bit ahead of it, is equipped with something more valuable than talent, industry or friends. He holds one of the real secrets of success.

Speaking of secrets brings us to consider the Masonic order and what it stands for. And here again we are confronted with a similar trick of etymology which gives to one word a twin meaning, each distinct yet fundamentally one. A stone mason is not necessarily a Free Mason. None the less, historically speaking, every Free Mason was also a stone mason. The whole ritual and symbolism of the order is, of course, very obviously based on the building craft.

There are those also who claim that certain symbols and features of construction peculiar to the King's Chamber in the interior of the Great Pyramid have a Masonic meaning and, of course, King Solomon's Temple and its construction is wholly identified both historically and symbolically with this wonderful order.

Speaking of the thirteenth century, one of the greatest architectural epochs of all time, the historian Hallam says: "The mechanical execution of medieval builders was so far beyond the apparent intellectual powers of those times that some have ascribed the principal ecclesiastical structures to the fraternity of Free Masons, depositories of a concealed and traditional science. There is probably some ground for this opinion, and the earlier archives of that mysterious association, if they existed, might illustrate the progress of Gothic architecture, and, perhaps, reveal its origin."

And if in point of time, its traditions go back beyond the memory of man, in point of space the Masonic cult seems practically ubiquitous. Traces of it have been found in remote islands of the Pacific, and there are well authenticated examples of explorers who have come across Masonic traditions and practices in villages formed

away in the mountain fastnesses of Kafiristan in midmost Asia.

An order or fraternity of such accredited antiquity and catholic establishment, which calls the Deity the Supreme Architect, and which symbolizes its spiritual cult in terms of the building craft in which it originated and which it has glorified through all its wonderful history should above all things be housed in a structure in keeping with its splendid traditions.

It is not too much to say that this Masonic Temple so recently dedicated is worthy of the great institution it enshrines. It is singularly beautiful. The stamp of distinction is visible on every square foot of its stone exterior. Its inner walls and halls are wrought in forms whose newness enchants the eye, yet whose oldness warms the memory. For it is the sign manual of creative genius to shock with what seems novel and yet to soothe with what seems familiar.

It was stated at the outset that this Masonic Temple was something of a protest, a novelty and a reaction. One might put the case in many ways, and with much elaboration, but, broadly, it is a protest against the cold logic of the schools; it is a novelty in city design, and it marks a reaction from the classic to the romantic.

Not long ago a competition programme was circulated in which it was stated that the buildings were not to be a series of palaces crowned with miles of classic cornices. A Hindu fable tells us that Brahma went on creating oysters for a million years before creating any other living thing. And I have sometimes wondered how many millions of modillions we have molded, and how many billions of eggs and darts we have put on our cornices in one generation alone. As Brahma finally got tired of making oysters, so we, too, show signs of being weary of these everlasting eggs and darts which, by the way, are not eggs or darts at all, but lotus buds upside down.

In other words, one can have too much of anything. One can have too much logic, for example. The uniformly reasonable plan, like the uniformly reasonable person, gets tiresome. Philosopher Bergson coördinates reason with inorganic things and mechanical processes, whereas instinct he associates with creation and the organic processes of life itself. The charm of women is not in their reasonableness, nor did reason ever rear a work of art, nor mathematics ever make a bar of music. This building we are considering is replete with charm and saturated with sentiment. Its appeal is to the feelings and the heart rather than to the intellect and the head.

A brief study of the plans and pictures here printed reveals the fact that the exterior design does not directly express the interior at all. In fact, one can state with some reservation, to be noted later, that the exterior of this building was designed by itself as a separate composition in wall surface and harmonious fenestration. Inspired by the finest of the Florentine palazzi, with some reminiscence of romanesque in the lower arcade and a spot of pure Gothic in the corner canopy, the street facades were worked out solely with regard to their contrasts of void and solid, to the jointing of the stone work and the upspring of the cornice, which runs like a trill of treble notes over the deep round openings of the basement.

Now this most interesting shell of Italian architecture, so interestingly proportioned, simple, yet instinct with variety and rather more sleek in texture than its more rugged prototypes, only represents and expresses the interior lodge rooms and banquet halls in a symbolic and not a structural way. Thus this outer shell does express the main facts of the floors, and it expresses them admirably. At a glance we see a ground floor of big halls, with a mezzanine space above expressed by the panels at the level of King Solomon's statue. Then we see another floor of halls expressed in the large arcaded windows of the second floor, with another mezzanine of lesser rooms above. Now, in reality a building that contains high lodge rooms with low ante-rooms and offices has its half story built under the ceiling level of the high room, so that two low stories occupy the space of one big one. In these very clever facades the small story is indicated above the big story in a way that gives delightful variety to the design, at the same time symbolizing the interior without slavishly repeating it. Thus the real first floor of lodge rooms is lifted up from the apparent first floor and starts from the level of the column heads. The uppermost lights of the main floor exterior arcade therefore are level with the second floor of the building. As these lodge rooms are used only at night, they are independent of outside light, and therefore these windows bear no relation, either vertically or horizontally, to the rooms inside them. A glance at the second floor plan shows how the inner shell is separated from the outer shell by a dead space several feet wide running all around the building. Thus the first floor of lodge rooms symbolized by the bold arcade which rises so superbly from the sidewalk is in reality telescoped up into the dead masonry of the building overhead and becomes actually a second floor. The space left below is in no sense a part of the institution, excepting that it brings revenue in the form of stores and other rentable space. This practical and profitable arrangement is managed without sacrifice of dignity. Both the association and the architects are to be commended for not demeaning so splendid a structure with a cheap expanse of plate glass show windows. It is, moreover, to be hoped that when tenants take possession they be restrained from cluttering up this noble arcade with a welter of merchandise or plastering this clean frontage with a riot of signs.

The second big story, as heralded on the outside of the building, though, of course, really the third story, is only partially expressed in the actual construction. One banquet hall and the Eastern Star Lodge are the only big rooms in the whole structure that as it were break through the inner shell and express themselves on the outside structurally and literally. The big Commandery on this floor is wholly inclosed in the inner shell. It is true that the dome forces its way through the roof where at some distance its smooth hemispherical surface becomes visible like a monstrous moon rising on the skyline, but it is in no sense a part of the architectural exterior. It must be confessed that it looks somewhat odd, yet it is infinitely less objectionable than the usual shanty town of pent houses, elevator heads, compression tanks and what not that our architects so seldom think of masking.

After one has grasped the main features of this building it is easy to realize that from a beaux arts viewpoint the whole scheme would meet with stern disapproval. The second floor plan would cause the average critic of the ateliers to tear his hair in a perfect frenzy of disapproval. And yet as a practical solution of a real problem faithfully carried out in steel and stone and not a picture plan on paper, the whole performance is a conspicuous success. Beneath the calm of this enchanting exterior lies buried a bewildering complexity of problems that only experts could realize. They have been solved with a patient ingenuity that is beyond criticism. The interior lodge rooms inspire one in their freedom

from what is commonplace, in their variety of treatment and in the pains bestowed upon them. The decorative schemes of form and color from carpet to ceiling have been worked out in that spirit of fidelity to minutiae which alone can produce work of genuine merit.

While space forbids a detailed account of these most interesting lodge rooms, one cannot conclude without considering for a moment the Grand Commandery, by far the most is spiring of them all. In form it is wholly Byzantine; in color it is also Byzantine, but stripped of those barbaric tones peculiar to that style and modernized and also, let us add, saddened somewhat. For all that, when the harsh white light of day is shut out and this enchanting little church is lit up with the incandescent effulgence of the great cross overhead, it is impossible to resist the spell cast upon one's spirit by these pictured walls of dulled azure and russet and gold by the sweep of the great arches that uphold the soaring dome and by the crimson symbol of Christianity glowing in a tympanum of gold—the final resting place of the delighted eye which is privileged to see and rejoice in the somber magnificence of this serene and incomparable shrine.

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General Description of Masonic Temple.

The most beautiful and striking building on the Pacific Coast is the new Masonic Temple, which was designed and erected by Messrs. Bliss and Faville, the architects, under the supervision of Mr. Thomas Muirhead.

The building is situated on Market street, at the intersection of Van Ness avenue and Oak street. It covers an area of 20,000 square feet.

The building has a heavy steel structural frame set upon very broad and deep foundations; the floors and walls are of reinforced concrete, faced with stone and terra cotta, and the structure comes under the heading of what is known as a "Class A" building. All the structural and mechanical work was designed by the most qualified engineers of their respective branches, and all work was executed by the most experienced and able constructors. No money was spared in the attempt to make this a worthy home and monument to masonry.

Architecturally it is a most happy and successful adaptation of the stately Florentine Italian school of architecture to the needs and requirements of present-day masonry.

The facades have a high-base course of granite, all above which in San Pedro white limestone, with the exception of the first-story pier caps, the third story window mullions and the cornice, which are of terra cotta.

One of the most striking features of the building is the great statue, carved in Alaska marble, which projects out from the corner. It represents King Solomon, standing upon his throne.

The bas-relief panels at the second-floor line and the golden shields above the main cornice line are emblematic of Masonry.

The arched entrance is executed in marble. In the tympanum is a panel with one male and two female figures carved in bas relief, representing Veritas, Veritas and Fortitude. The main vestibule is of Alaska marble.

Through double acting doors entrance is gained to the main corridor, which is simple but effective with a groined arched ceiling and paneled walls. To the right are six niches, wherein appropriate marble statues will be placed. The dado and floor are of Tavernelle marble.

At the left hand side, to the far end of the main corridor, is an inclosed elevator shaft. The shaft extends from basement to top floor, and opens into a spacious corridor on each floor and mezzanine. The shaft contains two large, high-speed electric elevators.

From the extreme end of the main corridor, through a fine marble doorway, entrance is gained into a great room, 46 by 112½ feet in size, which will, in the future, be used for the offices of the Grand Lodge and for a Masonic Library and Museum. This space will, for the present, be rented as stores.

Opposite the elevator shaft the corridor turns at right angles, and from there starts the grand marble staircase that extends to the top story.

From the great broad corridors of the second floor entrance is gained to four most elaborately decorated and sumptuously appointed lodge rooms, each of which is supplied with the necessary reception, tyler, examination and preparation rooms, and all these anterooms are decorated and appointed in keeping with the splendid lodge rooms. Each lodge room is also provided with well-equipped locker and service rooms.

Opening off the corridor and occupying an area of 27 by 61 feet between lodge rooms Nos. 1 and 2 is banquet room No. 3, having a vaulted ceiling and being well equipped with kitchen and serving rooms adjoining same.

Particular attention is called to a unique feature of the lodge rooms. Diligent study and planning evolved a scheme whereby the side walls of each of these rooms are isolated from the exterior walls of the building, thereby securing privacy and seclusion for "the working of the Craft" in each lodge room. The feasibility of the scheme was only rendered possible by reason of the elaborate indirect ventilating and electric lighting systems that have been installed.

These four lodge rooms are to accommodate the various blue lodges and chapters, and are designated as Nos. 1, 2, 3 and 4, and occupy the four corners of the building. Later these rooms will be designated by name. The decorations in each of the four lodge rooms could be described as modified Italian renaissance. Each room is illuminated by electricity, and by the use of handsome Alba glass bowls so arranged as to give a pleasing lighting effect.

Each lodge room floor is covered with a rich carpet of special design and manufacture, and the side walls are lined with luxuriant, leather-covered settees. Desks and furniture are artistic and appropriate.

In accordance with the canons of masonry, each lodge room has in the East, the South and the West, respectively, the symbol of the rising, the noonday and the setting sun.

In the west of each room, at either side of the platform, are the two Masonic columns, each supporting a sphere; one sphere representing the Universe and the other the Earth. Also, in the west of each lodge room is a massive balcony with a fine organ recessed in an alcove.

All of these rooms are well proportioned, with high ceilings.

Lodge Room No. 1 is in the southwest corner of the building. The prevailing tone of the room is blue. Heavy oak-paneled wainscot extends between fine large pilasters which extend from floor to heavy ceiling. The ceiling is wood paneled with girders and beams.

A special feature of this room are the highly artistic allegoric figures that line the panels of the pilasters and the ceiling girders for their entire length.

Lodge Room No. 2 is in the northwest corner of the building. The color scheme is soft blues and reds. The walls are wainscoted ten feet high with heavy oak paneling; above, the walls are decorated with a blue and white stencil design upon burlap. In each corner of the room there are four decorative niches for future statuary.

This room has a ceiling of particularly massive proportion, and it is worthy of special note inasmuch as the design simulates a pitched roof above. The room is fully equipped for both Chapter and Blue Lodge.

Lodge Room No. 3 is in the southeast corner of the building. The walls are wainscoted eleven feet high with a fine, plain, paneled wainscot made from Australian blue gum. Above, the walls are finished to represent stone ashlar. The predominating tone of this room is the soft cream color of the "stone a-hlar" walls. The wood ceiling is beamed and in keeping with the room.

Lodge Room No. 4 is in the northeast corner of the building. This room is devoted particularly to the workings of the chapters.

The walls are paneled thirteen feet high with Australian blue gum. Above, the wall surface is plain plaster up to the enriched plaster cornice, which is of classic design. The ceiling is plain.

The plaster walls are finished in a soft red, and the ceiling in a delicate blue.

The second-story Mezzanine is devoted to a lobby and staircase corridor, from which access may be had to the organ lofts and gallery rooms belonging to the four lodge rooms. The remaining space at this mezzanine level is devoted to locker and toilet rooms and to storage.

The third floor is practically devoted to the Commandery and the Eastern Star; each of them is provided with all necessary ante-rooms.

In the northeast corner of this floor is a large banquet room, No. 1, 45 feet square, with well-equipped kitchen and serving rooms adjoining same.

The Commandery is an impressive asylum. In plan it is cruciform, with a splendid dome 50 feet in diameter rising 85 feet above the floor. The dominant tones are blue and gold.

In accordance with the requirements of Masonry, the main floor area is occupied by the asylum. In the eastern transept is a perfectly equipped stage with the Red Cross over the proscenium arch. The northern and southern transepts are occupied by members' galleries.

Suspended from the center of the dome is the Grand Cross, illumined with over six hundred electric lights. The dome is decorated to represent the zodiac. The four pendentives are covered with gold leaf, each with a masonic shield in the center.

Allegoric signs and symbols of masonry are artistically and correctly shown throughout the asylum, with great oil paintings in the north and south transept walls over the members' galleries.

The Eastern Star occupies the southeast corner of the building. It is a great, bright, beautiful room, splendidly decorated and appointed.

The third floor mezzanine is of the same general character and is put to a similar use as is the second floor mezzanine.

The central portion of the top floor is occupied by a large room, 27 by 67 feet, dedicated to the comfort and convenience of all Master Masons, resident and visiting.

Along three sides of the building are located twenty-one finely appointed offices for lodge departments.

The lobbies and staircase corridors on all floors and mezzanines have Terrazzo floors laid out in panel effect. Above a marble base the walls are lined off and finished to simulate stone ashlar.

Door openings into the elevator shaft are protected with ornamental iron doors and polished wire-plate glass.

A really splendid drill and banquet hall has been provided in the basement. Its groined arch ceiling has a clear span 63 feet wide by 135 feet long, and there is not a single column or obstruction of any kind on the floor.

In connection with the requirements and uses of this splendid room, there has been provided a finely appointed kitchen, serving rooms, storage and locker rooms. Also, adjoining the main room there are ladies' parlors and gentlemen's lounging rooms.

In the basement there is provided a large vault for the archives of the lodges. Also storage space.

Mechanical Plant and Equipment—The entire building throughout is equipped with both the public long distance and the intercommunicating house telephone systems.

In all corridors high-pressure standpipes with valves and hose reels are installed.

Two complete lines of enclosed fireproof rear stairs afford convenience in service and meet the most exacting requirements of the Fire Department.

In all the rooms and corridors throughout the entire building are outlets in the base to which suction hose pipe may be attached for the purpose of removing dust and dirt from the premises. These outlets are all connected, through a special system of wrought-iron piping, to an efficient vacuum cleaning plant which is installed in the basement.

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Heating and Ventilating—Air is taken in from the Hickory street side of the building, and is heated and forced through a system of ducts to all rooms throughout the building. The vitiated air in the rooms is drawn off through a separate system of ducts and is exhausted above the roof level.

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The Paradox in the Arts

By ARTHUR F. MATHEWS

Dressed or undressed, adorned or undecorated, naked as God made her, tattooed in the fashion of some barbaric tribe, or in fig-leaf costume, lovely woman is lovely woman still. Even her forms and colors are separable from one another. Her mind can slip its prison, and the wondrous machine remain intact. Moreover, no particular shape or color of her is final; there are a myriad of variations of this bit of nature's mechanisms—the types of the feminine are infinite. It is the same with architecture—or what we assume to be the art of building—building pushed beyond the bare exigencies of economic construction or an engineer's proposition. Where there are but few systems of construction, there are an infinity of phases of the architectonic. Furthermore, architecture has taken on and put off as many styles of clothes (decorations) as lovely woman is reputed to have done; and I fear me the art has observed as little regard for purist, moralist or naturalness of form as lovely woman. How would it or could it be otherwise? Some say lovely woman wears clothes to keep

the wind away; others that she guards her modesty thus; while there are those who believe that clothes are worn as an added grace—concealing the essentially ugly in brutish construction—lending the charm of mystery to cold form.

So, even as lovely woman gathers her clothes, ultimately, about her—knowing that mystery added to beautiful form makes for real loveliness—an astute architecture snuggles under the charms of the decoration.

And even as lovely woman sees that her drapes are from the finest looms and shaped and decorated by the most skillful workers, even so a discreet architecture conducts itself; for such is the true art, the true economy.

Don't fudge! A decoration is something added, not a constructive part of something; and the moment one assumes it as something else—serving a structural function, or what not—just at that moment it becomes false, having no structural integrity, nor any raison d'etre, so to speak.

In any venture the architectonic in decoration is a manner of embellishment suitable for the enrichment of buildings, or it is a misnomer. Speaking prejudicially, one could well believe it to be a fashion, with little of structural integrity and not much sense of intrinsic values behind it.

In other words, architecture and the decorations, or conceits, happening with it are two and separable entities, more often than otherwise requiring two distinct heads for a successful issue.

True enough that the Master builded lovely woman and only his journeymen build her clothes; but architecture is only an art, an artifice, after all is said—and not a self-sufficient one at that, as intimated. No art may be said to be self sufficient, much less the artist. As Mr. Cram has said for us, the art is bigger than its forms. Nature herself is bigger than her examples. But all this is dodging a main issue, i. e.: Is architecture, after all said and done, anything more than a manner of concealing men's inaptitude for building beautifully, any other attitude being but a play on their egotism?

Speaking prejudicially again, and in the light of the millions of examples the art has given us, one could well say "yes" to the last principle, that the fine art of building is but a bit of "fictitious finery thrown about our utilities," with little else than ten-penny nails or cement to hold it in place; therefore the necessity of a better, a more truthful, principle to build an architectural criticism upon than that of "structural integrity," as they put it.

"Form follows function," Mr. Louis Sullivan declares; but what function, a tea party or childbirth? Pardon the seeming levity; the point is: Has lovely woman reached her perfection in physical being through the function of child bearing or through the dominant "human ideal," the desire to reach a glorious physical and mental type, regardless of the labors of childbirth? My prejudices all lean towards the "beautiful conception" in the ultimate creation of form and color, rather than towards the more limited one of "utility."

For centuries criticism worried itself over a simple matter in the fine art of painting; because painting showed a disposition, as the ages advanced, to come closer and yet closer to a similitude of natural forms, it was "self-evident that the imitation of natural forms and colors was the prime motive of the art"—when it was self-evident that such "imitation" was but an accident in the art—the decorative intention being uppermost in the artist's mind, whether he knew it or not. As a consequence, two "great camps" formed, one opposing the other, and squabbled over an immaterial matter—over a question as to "whether the fine art of painting should illustrate a superficial aspect of nature or the superficial ideals of an impudent cult?"

Again, pardon this interpolation—but one may well believe that architectonic criticism has tumbled, somewhat inadvertently, perhaps, into a like joker, and that the crux in this phase of criticism is very like that to any other that starts out from an arbitrarily assumed position. Lovely woman herself is paradoxical; why should an art be any clearer—less contradictory in "its obvious twofold capacity"?

Now, take the column, or portico, which every architect holds dear in these days, in the practice of the profession; is it used, or was it ever used—as we know it—as a matter of utility or because it had a constructive function in the art? Hardly! One could say with larger attention to truth that the column is introduced into architectural works as a symbol of power or more for its own lovely sake than as a necessity—a necessity in building. So the first question to ask, in criticism, is not whether a factor in an architectural makeup is structural in the material sense, but whether it is rationally used in the esthetic sense. We should ever ask first: Is it placed with telling effect, is it sufficiently beautiful, is it of the needful richness of material to stand for itself alone? Fixing this one proposition well in a people's mind would probably do more towards correcting "the evil tendencies" of the art than volumes on the parts pedantic.

And, moreover, we could approach this aggravating problem, the infusion or intrusion of the "skeleton steel framed building," into the sacred precincts of "traditional architectural design" with greater ease and with a better chance for a more graceful issue.

From time immemorial the crab has carried its bony structure on its exterior; could it be said justly that lovely woman, for the reason that she bears her well buried out of sight, is made with less of structural integrity? To my peculiar frame of mind, the very fact that the "carrying members in the steel frame manner of building" are well out of sight makes it a system of much broader artistic adaptability, aside from its evident advantages as a practical or economic device in building. And here we are at the bottom of things—"efficiency service"—at the adjustment or readjustment of the "superficial" to a deeper service.

The architect, like any other artist, has a certain poetic license; but if he once loses sight of efficiency in its twofold meaning, and of intrinsic values in the arts, he gives unwisely, his work falls short of a true character, and the decoration hangs on it like a Monday's wash. As with all others, he reveals his greater worth and the greater worth of his art in reservations, in the unconstricted, and in his adaptability to a change in conditions which react upon the art, whether he will or not—for efficiency and adaptability are twin brothers in this instance. So, if architecture has any troubles these days, they must spring from some such disregard of native principles as an ignorance of the mutability of climates, and the essentialness of intrinsic value in all forms of the decorative. The significance of an architectural term rests principally in its adaptability to a definite constructive purpose. This is granted. But the significance of a decorative entity reposes entirely in beautiful (skillful) workmanship, in the preciousness, in worthiness of its materials and in what it has to say for itself.

Yesterday nearly all "architectural forms" were evolved from a system of construction based upon masonry. Today masonry is a mere skin, a protection to the real structure only—and for that the system is condemned as an "architectural medium," or it is gracelessly accepted as an easy way to do a "stunt" regardless. Nevertheless, I believe the American architect is doing remarkable things in recreating "old forms"—all forms are grown old—to suit the "new purpose." Still, one may believe he would be more facile, quicker about it, if in the processes of his mutations, or reformations, of the old he could see his way more clearly on the purely decorative side of the art—a side that is in reality not of architecture, although generally believed to be.

In truth, the heavily carved and paneled wall and ceiling, so trite and significant in masonry construction, becomes insignificant when recreated in stucco, expanded steel and plaster, and but flimsily attached to a steel frame.

Mind, there is no statement here that says an architect is bound to perform this way or that way; the meat in the nut is this and this only: A work of art is a conviction—one way or the other—an expression of estheticism, it is ever very largely a fiction—so, in a justified criticism, we can only ask if the result is justified by the effort expended in producing it.

The trite question then in the present state of "mutilating old architectural forms" is: Are architects alive to the requirements thrust upon them by the almost universal use of the steel skeleton frame; are they really alive to the changes in directions of the "sister arts," and of the temper of the people generally? I sometimes feel they are not, as a class. One I know of has stated that no picture not decorative and suitable to go in an (his) architectural setting is admissible in such. He is wrong in two instances: (1) He misunderstands the term and meaning of the decorative. A comic sheet of the Sunday press is decorative, if rightly framed and placed against a right wall. Might as well say that the family shall eat off the floor, because the dining table interferes with an egoistic and exclusive architectural vista. (2) He overreaches an artist's privileges when he thrusts self farther in the foreground than his art, or what the service of the art means to a people in general. A house, mind, is made to live in and to contain the belongings of lovely woman—and sometimes her mate and his belongings. So when an architect disregards her shape and her size and all that is hers, he becomes a mere milliner—a dealer in misfits. And such is the moral.

Water-Proofing Problems.

This subject is demanding more attention and careful study all the time, especially in connection with concrete and stucco work, in fact all work wherein absorptive stone or brick is used. It is a recognized fact that all building material of a porous and absorptive nature must be treated in some manner to overcome this difficulty, if it is desired to have the building remain dry during rainy seasons. The various methods and materials used for this purpose we cannot at this time take up in detail. But having our attention called to the fact, that all the white stone work of the Masonic Temple was by the McGilvray Stone Company treated with Imperial waterproofing. To preserve the surface and prevent staining we have sought further information regarding this material. The above results are accomplished by treating the surface (not discoloring same in the least), thereby eliminating absorption, thus preventing stains of dirt penetrating.

We desire to call your attention to the card in this issue of the Imperial Company, who exclusively represent Imperial Water-proofing on the Pacific Coast. We are informed by them that, by the use of this material any basement or underground pit subjected to water preserve can be made absolutely water-tight. An extremely difficult underground water problem was successfully solved for the engineering department of the Pacific Telegraph and Telephone Company. A basement twenty feet underground was plastered on the inside, using Imperial Water-proofing as directed. The same department will now use the material on the eleven-story steel and brick faced building in Portland, at this time a new method positively assuring absolute non-absorptive walls by dipping every face brick in Imperial Water-proofing before laying and using the material for all mortar used to lay the face bricks. The material for this building will be furnished through F. T. Crowe & Co., who are the Portland representatives.

Extend Time on Weber Memorial

The committee on the Weber Memorial, Stockton, Cal., have extended the time on the competition from November 1st to December 1st. For further information address John P. Irish, Jr., Secretary, Chamber of Commerce, Stockton, Cal.

San Francisco Building Operations

Building construction for the month of October showed a slight decline in the amount of contracts filed for private construction. Less than two million dollars is the total amount recorded, including that of the Panama-Pacific Exposition. Segregated, the figures are as follows: Brick and fireproof construction, $843,385; frame buildings, $605,392; alterations and additions, $145,432; Panama-Pacific Exposition contracts, $283,868; total, $1,878,077.

This record, however, is about an average one for the month of October in the City and County of San Francisco. Compared with other years the record for the past decade is as follows:

October, 1904	$1,398,524
October, 1905	1,490,510
October, 1906	6,836,331
October, 1907	4,980,508
October, 1908	3,032,047
October, 1909	2,083,385
October, 1910	1,772,952
October, 1911	1,928,826
October, 1912	1,918,839
October, 1913	1,878,077

It will thus be seen that for the past three years construction work and private contracts have not varied much for the month of October. Outside of the rebuilding period, October has generally gone below the two-million mark. This year has been no exception to the rule. And from the indications the year will finish out about as it started in, with a good general average under the circumstances and a better average than most other cities representing building centers will show.

Attractive, modest homes should make up an important part of architecture for the next decade, and, of course, they should be built of brick.

THE AMERICAN INSTITUTE OF ARCHITECTS

The Octagon, Washington, D. C.

OFFICERS FOR 1913

President	Walter Cook, New York, N. Y.
First Vice-President	R. Clipston Sturgis, Boston, Mass.
Second Vice President	Frank C. Baldwin, Washington, D. C.
Secretary and Treasurer	Glenn Brown, Washington, D. C.

BOARD OF DIRECTORS

For One Year

A. F. Rosenheim, 615 H. W. Hellman Bldg., Los Angeles, Cal.
Thomas R. Kimball, McCague Building, Omaha, Neb.
Milton B. Medary, Jr., 139 S. Fifteenth St., Philadelphia, Pa.

For Two Years

Irving K. Pond, Steinway Hall, Chicago, Ill.
John M. Donaldson, Penobscot Building, Detroit, Mich.
Edward A. Crane, 1012 Walnut St., Philadelphia, Pa.

For Three Years

Burt L. Fenner, 160 Fifth Ave., New York, N. Y.
C. Grant LaFarge, 25 Madi on Sq. N., New York, N. Y.
H. Van Buren Magonigle, 7 West 38th St., New York, N. Y.

Auditors

Thomas J. D. Fuller, 803 Seventeenth St., Washington, D. C.
Robert Stead, 906 F Street, Washington, D. C.

San Francisco Chapter, 1881—President, G. B. McDougall, Russ Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, George B. McDougall, 235 Montgomery Street.
Date of Meetings, third Thursday of every month; annual, October.

Southern California Chapter, 1894—President, Robert B. Young, 701 Lankershim Building, Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Bryne Building, Los Angeles.
Date of Meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, Edgar M. Lazarus, Chamber of Commerce Building, Portland, Ore.
Secretary, Harrison A. Whitney, 912 Lewis Building, Portland, Ore.
Chairman of Committee on Public Information (not known).
Date of Meetings, third Thursday of every month, (Portland); annual, October

Washington State Chapter, 1894—President, Charles H. Alden, Crary Building, Seattle, Wash. Secretary, Arthur R. Loveless, 601 Colman Building, Seattle, Wash.
Chairman of Committee on Public Information, Chas. H. Alden, Cary Building, Seattle (all further notice send all communications to A. R. Loveless, 620 Colman Building, Seattle.)
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November

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The American Institute of Architects 1857—1913

Program Forty-seventh Annual Convention

New Orleans, La., December 2, 3 and 4, 1913
Headquarters, The Grunewald, New Orleans, La.

Delegates will be distinguished by a blue knot, and will occupy seats from the front row as far back as is necessary for their accommodation. Attendants, not delegates, will be distinguished by an orange knot.

Members of the Institute who are not delegates are entitled to take part in all discussions, to offer resolutions and motions, and to vote on a proposition that it is the sense of the meeting.

All sessions will begin promptly at the hours named in the program.

The Board of Directors will meet Monday, December 1, at 10 a. m.

The committees, to whom will be referred reports, will meet Monday, December 1, at 10 a. m., in rooms provided in the Grunewald.

The Institute committees which have subcommittees for the various Chapters, will hold conferences of their members in rooms provided in the Grunewald.

The Committee on Public Information, D. K. Boyd, Chairman, and the Committee on Competitions, M. B. Medary, Jr. Chairman, will meet Monday evening, December 1, at 8 p. m.; the Committee on Education, C. C. Zantzinger, Acting Chairman, and the Committee on Membership, J. H. Rinkin, Chairman, will meet Tuesday evening, December 2, at 8 p. m., in rooms provided in the Grunewald.

ORDER OF BUSINESS

Tuesday, December 2

(a) Morning session, 10 o'clock

1. Members of the Institute will meet on the first floor of the Grunewald Hotel at 9:30 o'clock
   (a) Register their names
   (b) Address of welcome by Hon. Luther J. Hill, Governor of Louisiana.
   (c) Address of the President, Mr. Walter Cook.
   (d) The President will announce the following committees to whom addresses and reports will be referred:
   Committee on Professional Ethics.
   Committee on President's Address.
   Committee on Report of the Board of Directors.
   Committee on Reports of Chapters.
   Committee on Report of Standing Committees.
   Committee on Reports of Special Committees.
   Committee on Resolutions.

To order no especial business, these several committees to which it is asked to prepare memoranda thereon in advance and submit them to the Secretary or to President or to the Chairman of the Committee on Resolutions. This will be proved by motions of instructions upon the floor.

   (e) Convention Hall and Exhibition.
2. Report of the Board of Directors.
3. Report of the Treasurer and Auditing Committee.
4. Reports of Chapters, if specific to the Secretary.
5. Report of Committee on Competitions to the Secretary in October 15, 1913.

On Standing Committees:

   (a) On Constitution and Supervision of Competitions (Milton B. Medary, Jr., Chairman).
   (b) On Allied Arts (Thos. R. Kimball, Chairman).
   (c) On Government Appointments (J. H. Rinkin, Chairman).
   (d) Home Committee (Louis P. Dow, Chairman).
   (e) Committee on Education (C. C. Zantzinger, Acting Chairman).
   (f) Committee on Competitions (M. B. Medary, Jr., Chairman).
   (g) Memorials sent to the Secretary or Members of the Institute.

Of Special Committees:
- (h) Relations of Chapters to the Institute, Irving K. Pond, Chairman.
- (i) Conservation of Natural Resources, Cass Gilbert, Chairman.
- (j) Delegates on Testing Material, A. O. Elzner, Chairman.
- (k) On Electrical Code and Fire Protection, Julius Francke.
- (l) On International Congress of Architects, Walter Cook, President.
- (m) On Town Planning, H. V. B. Magonigle, Chairman.
- (n) On Legislation, L. C. Holden, Chairman.
- (o) On Schedule of Charges, I. K. Pond, Chairman.
- (p) On Government Competitions, John Hall Rankin, Chairman.
- (q) On Public Information, D. Knickerbacker Boyd, Chairman.
- (r) To Confer with the National Association of Master Plumbers, D. Everett Waid, Chairman.

(2) Afternoon Session, 2 o'clock.

1. Reports of committees not presented at the morning session.
2. Amendments to the Constitution.
3. Amendments to By-laws.
4. Discussion on the Amendments.

WEDNESDAY, DECEMBER 3.

(3) Morning Session, 10 o'clock.

1. Report of Committee on Credentials.
2. Vote on Amendment to the Constitution and By-laws.
3. Reports of committees appointed at the first session and their consideration—
   - (a) On the President's Address.
   - (b) On the Report of the Board of Directors.
   - (c) On the Reports of Chapters.
   - (d) On the Standing Committees' Reports.
   - (e) On the Special Committees' Reports.
   - (f) On Resolutions.
4. Presentation of a proposed law to control the Government Fine Arts.
5. Unfinished business.
6. Miscellaneous business.

(4) Afternoon Session, 2 o'clock.

1. Committee Reports: Discussion continued.
2. New Business.
3. Election of Officers. Polls open from 3 to 5 p. m.

Evening, 8 o'clock.

Reception to Members of the Institute by the Louisiana Chapter. Two addresses on the question of Government Fine Arts by ———. The public invited by card.

THURSDAY, DECEMBER 4.

(5) Morning Session, 10 o'clock.

The principal topic of discussion on this occasion will be the Status of Government Fine Arts.

(6) Afternoon Session, 2 o'clock.

1. Report of Tellers.
2. Unfinished business.
3. Visit to points of interest in New Orleans.

Evening, 8 o'clock.

Banquet.

The speakers upon this occasion will be

Members of the Institute have been invited to view the new buildings of the Rice Institute, Houston, Texas, after the Convention. All who desire to take advantage of this invitation are requested to notify Mr. Wm. Ward Watkin, Houston, Texas.

Those who desire to make a side trip to Panama will have the opportunity, as boats leave every Wednesday and Saturday. Fare, including meals, $95 to $100.

GLEN BROWN, Secretary.

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San Francisco Chapter A. I. A.

The annual meeting of the San Francisco Chapter of the American Institute of Architects was held at the St. Germain Restaurant on Thursday evening, October 16, 1913. After dinner the meeting was called to order by Mr. Geo. B. McDougall, at 8:30 o'clock.

There was an attendance of twenty-six members.

MINUTES

The minutes of the regular meeting of September 18, 1913, were read and approved.

STANDING COMMITTEES

Sub-Committee on Public Information.

Mr. Mooser, on behalf of the Sub-committee on Public Information, read and submitted the written annual report, which was ordered received and placed on file.

Sub-Committee on Competitions, A. I. A.

Mr. Mooser, for this committee, submitted a written annual report, which was read and ordered placed on file.

Architectural League and Education Committee.

In the absence of Mr. A. G. Headman, there was no report from this committee.

San Francisco Building Laws Committee.

In the absence of Mr. W. H. Toepke there was no report from this committee, but Mr. Mooser, a member of the Supervisors' Special Committee on the Revision of the Building Laws, reported that there had been no occasion for the Chapter's committee to act. As a member of the Supervisors' committee he stated that this committee had adjourned in June and had not resumed their sessions since. Up to the time of adjournment, many amendments to the Building Code had been discussed. Mr. Mooser also submitted a written annual report, which was ordered received and placed on file.

Committee on Commercial Bodies.

Mr. Henry A. Schulze read a written annual report, which was ordered received and placed on file.

Publicity Committee.

Mr. T. J. Welsh read a written annual report, which was ordered placed on file.

SPECIAL COMMITTEES

Committee on Legislation.

Mr. E. A. Mathews read a written annual report, which was ordered placed on file.

Committee on Buildings in the Civic Center.

Mr. Mooser read a written annual report, which was ordered placed on file.

Education Committee on Practice.

In the absence of Mr. C. P. Weeks, Mr. Wm. A. Newman submitted a written annual report and correspondence with Mr. Weeks, which were ordered placed on file.

City Beautiful Convention.

Mr. E. J. Vogel made a verbal report.

REPORT OF OFFICERS

The Secretary read the annual report of the Board of Supervisors and the report of the Secretary and Treasurer, both of which were ordered received and placed on file. The President read his annual address, which was ordered received and placed on file.

On motion duly made, seconded and carried, the officers and committees were tendered the thanks of the Chapter for their services during the past term, and the Secretary was directed to have the annual reports printed in accordance with the usual custom.

COMMUNICATIONS

The following communications were received and ordered placed on file:

From Glenn Brown, Secretary A. I. A., inquiry regarding legal decisions in reference to the ownership of drawings, specifications, etc.

From the Panama-Pacific International Exposition, with enclosed pamphlet regarding "Facts About the Exposition."

From the Chicago Business Association further reference to uniform size of architectural literature.

Photo by Leonard Mason

Masonic Temple, San Francisco, Cal.
Dirk & Fernie, Architects

Main Entrance, Masonic Temple, San Francisco, Cal.
Miller & Pflueger, Architects

Main Entrance Hall

Detail

Masonic Temple, San Francisco, Cal.

Commandery Hall Dome

Photo by Taber

Commandery Hall Looking East

Photo by Taber

Masonic Temple, San Francisco, Cal.

Bliss & Faville, Architects

West Station Lodge, No. 2

Grand Balcony Lodge, No. 2,
Masonic Temple, San Francisco, Cal.

Photo by Gabriel Moulin

Station in the East Lodge No. 1

Photo by Gabriel Moulin

Organ Balcony Lodge No. 1

Masonic Temple, San Francisco, Cal

Bird & Faville, Architects

Detail Corner Pilaster Lodge No. 1

Detail Wall Pilaster Lodge No. 1

Masonic Temple, San Francisco, Cal
Bliss & Faville, Architects

Detail Corner Pilaster Lodge No. 2

Photo by Gabriel Moulin

Photo by Gabriel Moulin

Station in the East Lodge No. 4

Photo by Gabriel Moulin

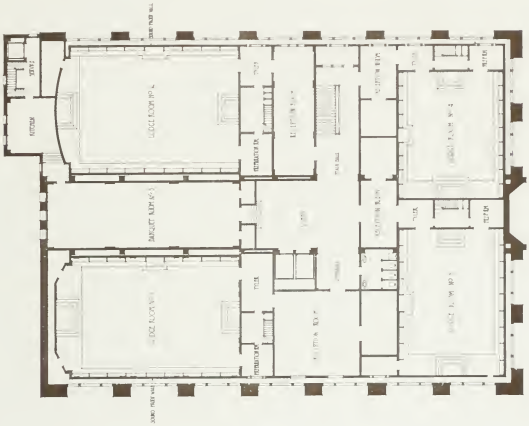
Organ Balcony Lodge No. 3

Masonic Temple, San Francisco, Cal

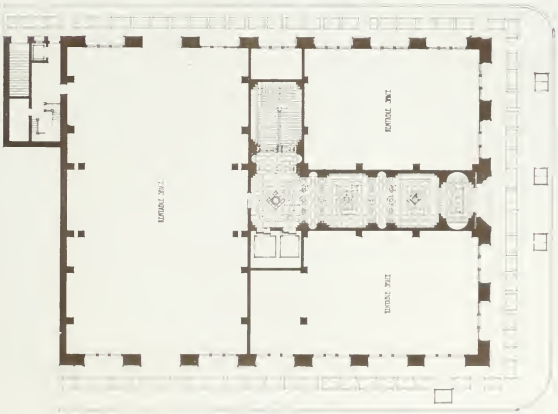
Bliss & Faville, Architects

Ceiling of Eastern Star Lodge — Photo by Gabriel Moulin

Officers' Chairs Eastern Star — Photo by Gabriel Moulin
Masonic Temple, San Francisco, Cal.
Bliss & Faville, Architects

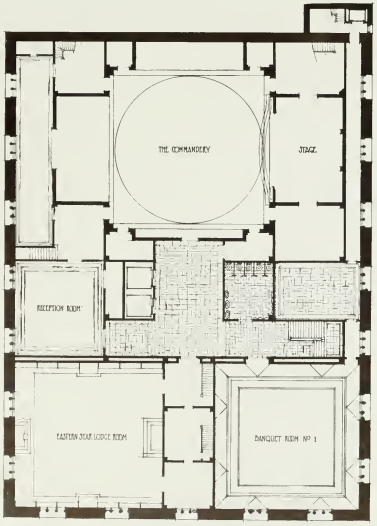


SECOND FLOOR PLAN

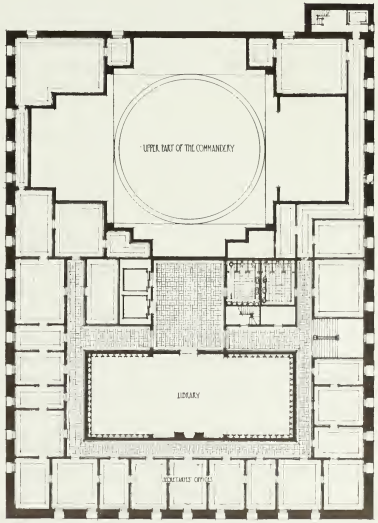


FIRST FLOOR PLAN

Masonic Temple, San Francisco, Cal.
Hunt & Smith, Architects



THIRD FLOOR PLAN



FOURTH FLOOR PLAN

Masonic Temple, San Francisco, Cal.
Bliss & Faville, Architects

A letter from the Home Industry League, suggesting the attendance of some member of the Chapter at their weekly luncheons.

From Crosett & Eastman, estimating engineers, in regard to a new estimating bureau now in the course of organization.

From the American City Bureau, with enclosed circulars and pamphlet, in reference to city planning and municipal improvements throughout the world.

From Glenn Brown, in regard to election of delegates to the coming convention of the Institute.

From Knickerbacker Boyd, acknowledging receipt of our letter of September 16th, with enclosed resolutions.

From W. B. Faville, declining nomination of President of the Chapter.

From Paul Franklin and Cyril Brewster, applications for positions in city offices.

From the Technical Society of the Pacific Coast, announcement of their regular meeting and four copies of "The Quantity Surveyor."

NEW BUSINESS

The chair appointed Messrs. O'Brien and B. J. Joseph a committee to audit the books of the Secretary and Treasurer.

Mr. Lichtenstein submitted a written report on the matter of the public work of Marin County, and, on motion duly made and seconded, his report was referred to the California State Board of Architecture, with the request of their action.

On motion duly made, seconded and carried, the act designating "The Architect and Engineer of California" as the official organ of the Chapter was withdrawn. On another motion, duly made, seconded and carried, "The Pacific Coast Architect" was designated as the official organ of the Chapter.

In the matter of the communication of Mr. W. H. Ratcliff, the same was referred to the Competitions Committee for action.

ELECTION OF OFFICERS

The next order of business being the election of officers for the ensuing year, Mr. Faville requested that before his name be balloted upon his letter declining election be read to the Chapter. This letter, while dated October 2d, unfortunately reached the Secretary too late to enable a new nomination. Mr. Faville was asked to reconsider his action by the eloquent remarks of Messrs. Shea, Schulze, Mathews, Welsh and others. Mr. Faville responded, saying that it was no sense of shirking his duty, or any selfish reasons that prevented him from accepting the honor, but purely other circumstances which made it impossible. There being no other nominee for the office, action on a new nomination was deferred until the next meeting.

There being no other nomination, the Secretary was directed to cast a ballot for Mr. Edgar A. Mathews for the office of Vice-President. Mr. Mathews was then declared elected for the office of Vice-President for the ensuing year.

There being no other nomination, on motion duly made, seconded and carried, the President cast a ballot for Mr. Sylvain Schnaittacher for Secretary and Treasurer, and Mr. Sylvain Schnaittacher was thereupon declared duly elected Secretary and Treasurer for the ensuing year.

On motion duly made, seconded and carried, the Secretary was instructed to cast one ballot for Mr. H. A. Schulze for Trustee. The ballot was cast, and Mr. Schulze was duly declared Trustee for the ensuing year, in place of Mr. Mooser. Mr. McDougall, the other nominee for Trustee continuing to act as President, was ineligible, the nomination of the other Trustee was deferred until the next meeting, Mr. Faville to continue to act as Trustee.

ADDITIONAL BUSINESS

Announcement was made of the appointment of Mr. Mathews, the Vice-President of the Chapter, as a member of the California State Board of Architecture, and a motion was duly made, seconded and carried that the Chapter send a letter of appreciation to Governor Hiram W. Johnson on the appointment.

The following were duly nominated and elected delegates to the next annual convention of the Institute at New Orleans:

W. B. Faville	Geo. B. McDougall
Henry A. Schulze	Sylvain Schnaittacher
Wm. Mooser	

On motion duly made, seconded and carried, the delegates were empowered to select suitable proxies to fill any or all vacancies.

Mr. Schulze read a selection from an address delivered before an engineering society, relative to the positions of the architect and engineer.

The Secretary read a clipping from the San Francisco Chronicle of recent date showing the activity of the Chapter in municipal affairs twenty-five years ago.

On motion of Mr. Mooser, the Secretary was directed to communicate with Mr. Curlett as to the state of his health.

ADJOURNMENT

There being no further business before the Chapter, on motion duly made, seconded and carried, the meeting was adjourned at 11:30 p. m.

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Annual Meeting of Southern California Chapter A. I. A.

Mr. Robert B. Young was elected president of the Southern California Chapter, American Institute of Architects, by acclamation at the annual meeting held Tuesday evening, October 14th, at the Hoffman Cafe. Albert C. Martin was unanimously elected vice-president. Fernand Parmentier was reelected secretary and August Wackerbarth was reelected treasurer. Mr. Parmentier and Mr. Wackerbarth have served in their respective offices for a number of years and a faithful discharge of official duties was responsible for the unanimous vote cast for them. Jos. J. Blick of Pasadena was elected to serve three years as a director, succeeding Mr. Martin, whose term expired this fall. A vote of thanks was given the outgoing officers.

John C. Austin, retiring president, was unable to attend on account of a slight illness; however, he sent a message to the members containing a brief outline of the work of his two years' administration, and suggestions for the future.

The annual reports of the secretary, treasurer and directors were read.

Frank D. Hudson presided at the meeting. Mr. Young, the retiring vice-president and incoming president, who has been ill for several months, was unable to attend.

The Chapter decided to send a boosters' committee to the annual convention of the Institute at New Orleans in December to urge the selection of Los Angeles as the convention city in 1915. An attempt will be made in advance the date of the convention so that Institute members can include the San Francisco and San Diego expositions on their trip.

Southern California Chapter A. I. A. Committees

Robert B. Young, president of the Southern California Chapter A. I. A., has appointed the following members to serve as chairmen on the various committees, the committee members to be selected by the chairmen:

Committee on Member-ship—Frank D. Hudson.

Committee on Entertainment—John P. Krempel.

A. I. A. Sub-committee on Public Information—Albert R. Walker.

A. I. A. Sub-committee on Competitions—J. E. Allison.

Permanent Committee on Legislation—J. J. Backus.

A. I. A. Sub-committee on Education—John C. Austin.

Committee on Ethics and Practice—Theo. A. Eisen.

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Annual Meeting of the Washington State Chapter of the American Institute of Architects.

By CHARLES H. ALDEN

The annual meeting of the Washington State Chapter of the American Institute of Architects was held at the University Club, Wednesday, November 5th, twenty members being in attendance.

After the regular business was disposed of the yearly reports of the Secretary, Treasurer and standing committees were read. In the election, which proceeded throughout the evening, the following officers for the ensuing year were elected:

Charles H. Alden.....President
J. F. Everett, G. F. Gove, and K. K. Cutter .....Vice-Presidents
Arthur L. Loveless.....Secretary
A. C. P. Willatzen.....Treasurer
W. R. B. Willcox.....For Council

Delegates elected to the Institute convention in New Orleans were Charles H. Alden, J. H. Schack, C. H. Bebb, and W. J. Sayward.

The annual address of President Willcox, which related to certain phases of the relation between the architect and the public, was an interesting arraignment of some weaknesses of architectural design, and was made the subject for discussion at the next regular meeting. Mayor Cotterill, the guest of the evening, spoke on some points of practical application of the new Building Code, and suggested the matter of illuminated street signs as one which deserved some attention from those interested in civic beauty.

Referring to his recent trip abroad, he gave an interesting account of the layout of European cities in regard to parks, boulevards, etc., which in most cases was made possible by the change from the ancient walled cities to the modern commercial one.

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Texas Architects Meet

The Texas State Association of Architects met at Dallas, that State, in annual session October 20th to 23d. It adopted a set of changed rules to govern contests or building competitions to be entered into by the members of the association. The changes will have the effect of making the rules more liberal and of permitting the members of the association to enter into many contests, especially in the smaller towns of the State, from which they were formerly barred by their own regulations. At present they may not enter contests on buildings costing less than $25,000, and other rules prevented a general competition, and the changes are designed to place all architects upon more nearly the same footing.

The proposal to construct a building for exhibits in permanent form of architects' perspectives and building materials was left to the Dallas Society of Architects, by which the plan was fostered originally. The sense of the convention was that the Dallas society is the only one in the State capable of carrying out the scheme, and it was left to the discretion of that organization whether the plan is feasible and advisable or not, and to take the initiative if deemed advisable.

A new form for a contract and bond between architect and builder was adopted.

The association selected Waco as the meeting place for 1914, the dates to be fixed some time during the Waco Cotton Palace by vote of the Waco members of the State association. H. A. Overbeck of Dallas was elected president of the State association. Other officers were elected as follows: O. J. Loraine, Houston, first vice-president; C. D. Hill, Dallas, second vice-president; H. C. Frost, El Paso, third vice-president; M. J. Diehman, San Antonio, fourth vice-president; E. Stanley Field, Fort Worth, fifth vice-president; Roy E. Lane, Waco, sixth vice-president; D. F. Coburn, Dallas, secretary-treasurer. President Overbeck is to appoint a legislative committee for the next year.

H. M. Bernet was continued as chairman of the civic improvement committee, being empowered to appoint one member of the association in each city of the State to have special charge of the work in that place.

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The Pacific Coast Architect was designated as the official organ of the San Francisco Chapter of the American Institute of Architects at the meeting held October 16, 1913.

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Another Factory for California

Among the many Eastern manufacturers to recognize the advantages of a Pacific Coast factory site is Berry Bros., with head offices at Detroit, Mich., where their main factory is also located. Theirs is recognized as the largest varnish plant in the world, and their coming to California and locating here will undoubtedly influence manufacturers in other lines. Their plant will be situated on the bay, affording both rail and water transportation.

James S. Stevenson, the general manager of Berry Bros., has just returned to Detroit after an extensive trip of this Coast in quest of a location, as their Western and export business has reached such proportions that they found it necessary to quicken the service for this trade, and the only solution was in establishing a Pacific Coast factory. While Mr. Stevenson was impressed with this section, he would make no decision until he had covered the entire Coast, and the news just reaches us that he has decided to locate here and will start operations immediately.

Chas. H. Adams will continue as Pacific Coast manager and Thos. H. Gehrken as office manager.

W. H. Worden, one of San Francisco's best-known varnish makers, will superintend the factory.

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STATEMENT OF OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., OF THE PACIFIC COAST ARCHITECT,

Published Monthly at 725 Chronicle Bldg., San Francisco, Calif.

President and Editor.....L. J. FLYNN
Manager, Secretary and Treasurer.....J. A. DRUMMOND
Publishers.....COAST PUBLISHING CO., Inc.
725 Chronicle Bldg., San Francisco, California.

The owners holding one per cent or more of stock are: J. A. Drummond, A. M. Flynn, Frank O. Creasey. There are no bondholders, mortgagees or other security holders.

L. J. FLYNN,
President and Editor.

Sworn to and subscribed before me this twenty-sixth day of September, 1913.

PERCY E. TOWNE,
Notary Public, San Francisco County, California.

My commission expires Jan. 11, 1916.

A Fire Test of Tin Roofing

On the night of July 22, 1913, a fire destroyed two large frame buildings at the works of N. & G. Taylor Co., at Cumberland, Md. These buildings were all old fashioned, heavy timber construction, and represented the last of the old-time buildings around the plant. The fire was an exceptionally hot one, and for a time threatened wide-spread damage. The progress of the flames, however, was checked at the critical point by the tin roofing covering a power-house containing valuable electrical equipment.

The two illustrations reproduced herewith clearly show how effective was the tin roofing in checking the fire. So close were the flames that the paint was burned off the tin and the solder melted from the seams, but the damage to the building was slight.

The Taylor Company have been especially active in presenting to architects and the building public the many advantages of high-grade roofing tin as a superior roofing material. Many examples of their enterprise in securing evidences of the superiority of tin have been published in our columns in the past. It is appropriate that they should have had so good an illustration and proof of one of the arguments for tin roofing they have been urging for so many years on this fire at their own plant.

Needless to say, the roof in question was Taylor's Target and Arrow roofing tin, the pioneer, genuine old style brand.

Trade Notes

Gladding, McBean & Co. furnished all the architectural terra-cotta on the new Masonic Temple.

Architect A. F. Rosenheim, Los Angeles, has returned from an eastern business trip.

Nuese & Thorne, master builders, have opened offices at 1217 Hearst Building.

Architect DeForest Howry is now located at 1036 Van Nuys Building, Los Angeles, having moved his office from the Mason Opera House Building.

Architect S. B. Birds, Vancouver, B. C., is on an extended trip to eastern Canada on business.

B. W. Roberts has returned from a business trip to Seattle and Portland.

Architect Walther H. Ratcliff, Jr., has been appointed City Architect of Berkeley, Cal.

The Otis elevators which were installed in the Masonic Temple are shown in this issue.

Architects Arthur L. Acker and Otto Janssen, Los Angeles, have moved their offices from 1127 to 1101 Storey Building.

Architect Chester Miller, Oakland, has moved his offices to the new Dalziel Building.

Architect Otto Neher, Los Angeles, has returned from a five weeks' trip throughout the Pacific Northwest.

Architect Raphael A. Nicolias, Vancouver, B. C., has moved his office from the Rogers Building to 926 Birks Building.

W. A. Roberts has returned from a two weeks' business trip to Portland and the Puget Sound country.

Architect F. W. Macy of Vancouver, B. C., is a San Francisco visitor.

Architect John Parlett of Kamloops, B. C., is visiting San Francisco.

The Pacific Manufacturing Company of Santa Clara furnished most of the mill work on the new Masonic Temple.

Architect James W. Reid, of Reid Bros., San Francisco, has returned from a business trip to Portland, Ore.

Reid Bros., architects, have moved their Portland office from 318 Yeon Building to 603, same building. W. E. Reid of the Portland office has returned from a trip to Vancouver, B. C.

Architect W. B. Bell, Portland, has moved his office from the Worcester Building to Suite 550, Sherlock Building, where he will become associated with George Rae.

Architect Alfred W. Burgren, formerly of the firm of T. Patterson Ross and A. W. Burgren, announces that he has opened offices in the Holbrook Building.

Architect R. B. Young, Los Angeles, has been on the sick list for some time, but is now reported to be improving.

Architects William Curlett & Son have moved their office from 733 Phelan Building to 956-958 same building.

Architects Smith & Yerrick, Oakland, have moved their office from 232 Blake Block to Room 217 same building.

Architect W. G. Maass has moved from Calgary, Alberta, to 427 Euclid avenue, Sandpoint, Idaho.

M. S. Yeager, of M. S. Yeager Company, architectural designers, Los Angeles, has returned to his office after several weeks' illness.

Architect A. A. Geiser, formerly with Architect J. F. Everett, Seattle, Wash., will open an architectural office in Juneau, Alaska.

Architect A. A. Cox, with offices in Vancouver and Victoria, B. C., has returned from Prince Rupert after inspecting the temporary Government buildings located there.

Architect Charles S. Kaiser, 404 Mechanics' Institute Building, has returned from a two months' trip spent in the eastern states.

Architect Samuel B. Zimmer has opened an office in the Savings and Trust Building, Santa Ana, Cal. Mr. Zimmer was formerly located in San Francisco.

Architect R. E. Heine, 318 Yeon Building, Portland, Ore., was a recent San Francisco visitor while on a trip to Southern California.

The new single-unit Mohrlite fixture will be installed throughout the new Hind Building on California street.

Architect Earl J. Brenk, San Diego, has returned after spending several weeks on a wedding trip to San Francisco and Santa Cruz.

The Architectural Designing Company, San Diego, formerly owned by Stelzer & Ketzner, is now owned by T. C. Ketzner. His partner will go East on other business.

A. W. Eckberg, from the sales department of the Dahlstrom Metallic Door Company, Jamestown, N. Y., is in Seattle superintending the installation of their work in the L. C. Smith Building.

Architect Fred R. Down, Los Angeles, has moved his office from the Douglas Building to suite 1230-32 Marsh and Strong Building, for which he was the architect.

Architect Robert F. Tegen, Portland, has moved from the Swetland Building to more commodious quarters in the new Morgan Building, Broadway and Washington street.

The American Marble and Mosaic Company, San Francisco, furnished the Tavernelle Clair marble for all interior entrance work, and Alaska marble and Antaide vestibule on the new Masonic Temple.

Charles Eisele, for the past fifteen years associated with the well-known firm of Batterson & Eisele, New York City, is now associated with the American Marble and Mosaic Company, San Francisco.

Architect Albert Wood has opened offices at 210 Hoge Building, Seattle. Mr. Wood has recently returned from Vancouver, B. C., where he had charge of erecting several large buildings.

Architects J. Martyn Haenke and W. J. Dodd, Los Angeles, have dissolved partnership by mutual consent. Mr. Haenke will continue the office at 1114 Story Building. Mr. Dodd will also continue the practice of architecture.

N. Clark & Sons will furnish the Matt glaze terra cotta in polychrome for the new Young Men's Institute Building to be erected on Oak street, near Van Ness avenue. Plans drawn by Architect Will Shea.

Mr. W. D. Leary, of W. P. Fuller & Co., delivered a lecture, entitled "Protective Paints and Pigments," at the regular meeting of the Technical Society of the Pacific Coast, held at the Mechanics' Institute, Thursday evening, October 30th.

W. P. Fuller & Co. have just executed a contract worthy of mention on the new Masonic Temple, having furnished all the plate glass mirrors and art glass in the building, some of the plate being of an exceptional length—214 inches long.

David Zelinsky, painter and decorator, 564 Eddy street, has the contract for painting and decorating the $1,000,000 Davenport Hotel at Spokane, Wash., the Travelers Hotel, Sacramento, Cal., and the Oakland City Hall, Oakland, and has recently finished the painting and decorating of the new Masonic Temple, San Francisco.

V. C. Soule, manager of the Simplex Window Company, has returned from a business trip through the San Joaquin Valley and reports business in a flourishing condition for the Simplex window, now being used in school houses, bank and office buildings and many residences.

The American Marble and Mosaic Company, San Francisco, have purchased the Jupiter Steel Plant, South San Francisco, and will equip the largest and most modern plant of its kind in the West. Their plant will be situated on the bay, affording both rail and water transportation.

E. W. Hendricks, Portland, Ore., of Bennes & Hendricks, architects, has announced his retirement, to take effect at once. Mr. Hendricks says that he will move to Hubbard, Ore., where he owns a 40-acre orchard tract. Mr. Bennes will continue the firm's architectural work in the new offices in the Chamber of Commerce Building.

The Mohrlite Company, Inc., 249 Minna street, have thoroughly remodeled and enlarged their office and have leased three lofts, so that they will be able to take care of their ever-increasing business. The Mohrlite fixture is now being installed in many of the most prominent buildings not only on the Coast but in the eastern and middle states.

J. A. Drummond, Pacific Coast representative for N. & G. Taylor Co., Philadelphia, has returned from a two months' business trip in the East, where he visited the main office and their rolling mill and new tinning mill at Cumberland, Md., which is the last word in a model constructed tinning house and is now in full operation. While away Mr. Drummond visited the principal eastern and middle west cities, also mingled a little pleasure along by seeing the World's Series ball games at New York and Philadelphia.

Architect G. Alexander Wright, 517 California street, is on an extended trip that will take him to the larger cities of the United States where he will deliver lectures on the Quantity System of Estimating to the different architectural societies and builders' exchanges. He will return in time to attend the annual convention of the American Institute of Architects, to be held in New Orleans on December 2d, 3d and 4th.

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SPECIAL NOTICE. Instructor in Architecture at Oregon Agricultural College (3 years) wishes to return to professional practice. Would consider employment by established firm, which might lead to partnership or association with engineer to practice on Pacific Coast or intermountain country. University trained, office experience. Good address. Address R. H. Dobell, 304 Mines Bldg., Corvallis, Oregon.

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CALIFORNIA

Apartment House—San Francisco—Architects Faleh & Knowl, Hirsa Building, have prepared plans for a three-story and basement frame apartment house for Miss D. Laiza, to be erected on the corner of Washington and Taylor streets, to cost $25,000.

Carpet—San Francisco—Architect R. Thayer, National Bank Building, has prepared plans for a two-story and basement reinforced concrete garage, to be erected on Van Ness avenue, near Jackson street, for F. B. Davidson, to cost $30,000.

Residence—San Francisco—Architect A. H. Peterson, Mills Building, has prepared plans for a two-story frame residence for A. Cofer, to cost $5,000.

Garage—San Francisco—Architect Frederick H. Meyer, Bank of California Building, has prepared plans for a one-story and mezzanine floor, reinforced concrete garage building for Walter Selbrede, to cost $35,000.

Residence—San Francisco—Architect E. G. Bolls, 660 Market street, has prepared plans for a two-story frame residence for S. A. Merry, to be erected on 25th avenue near Lawton, to cost $8,000.

Hotel—San Francisco—Architect Frank S. Tichard, 109 Hewlett Building, has prepared plans for a six-story, reinforced concrete hotel building, to be erected on Sutter street, near Taylor, to cost $45,000.

Amusement Park—San Francisco—Architects Coates & Travers, Hunt Building, have prepared plans for the Ocean Pier Amusement Co., 706 Merchants National Bank Building. The buildings are to be two-story, built of reinforced concrete and frame, and cost $1,000,000.

Amusement Park—Alameda—Architect A. L. Mautner, Bacon Building, Oakland, has prepared plans for a Casino, Bowling House, Bath House and Swimming Pool for the Alameda Baths and Swimming Co. The buildings will be built of concrete and frame construction and to cost about $200,000.

Store and Office Building—Fresno—Architect J. L. Cory has prepared plans for a four-story Class A building to be erected on the corner of J and Fresno streets, to cost $120,000.

Nickelodeon—San Francisco—Architect C. O. Clausen, Phelan Building, has prepared plans for a one-story frame building, to be erected on the corner of Divisadero and California streets, to cost $10,000.

Store and Loft Building—San Francisco—Architect D. C. Coleman, Merchants National Bank Building, has prepared plans for a two-story basement brick and steel building, to cost $30,000, for M. Fisher, 105 Montgomery street. The buildings will be erected on the corner of Van Ness avenue and Sutter.

Store and Residence—Fresno—Architect Eugene Mathewson, Fresno, has prepared plans for a two story brick and steel building for Jacob Richter, to be erected on the corner of Mono and I streets.

Residence—Healdsburg—Architect John Hudson Thomas, First National Bank Building, Berkeley, has prepared plans for a one-story frame residence for Laura E. Gillis, to be erected at Healdsburg.

Residence—Oakland—Architects Hutchinson Bros., 470 13th street, are preparing plans for a two-story frame residence to be erected in Piedmont, to cost $4,500.

Residence—Fresno—Architect J. Carl Thayer is preparing plans for a two-story frame residence for P. W. Niedecker, to cost $8,000.

Residence—Fresno—Architect J. N. Saffell, New Fish Building, has prepared plans for two residences, two stories each, of frame construction, $3,500 and $5,000 respectively.

Armory—Oakland—Architects Oliver & Thomas, Pantages Building, have prepared plans for a two-story basement brick and steel building, to cost $11,000, for the Sisley C. Beatty Buildings, to be erected on 29th street, between Telegraph and Grand.

Club Building—Richmond—Architect J. B. Ogkers is preparing plans for a two-story Women's Club Building, to cost $7,000, for the Richmond Club.

Church—Willits—Architect E. W. Hyde is preparing plans for a one-story and basement frame church, to cost $10,000, for the First Baptist Church of Willits.

Apartment House—San Francisco—Architect C. O. Clausen, Phelan Building, is preparing plans for a three-story brick and steel apartment house, to be erected at Bush street, near Hyde, to cost $30,000, for M. S. Snow.

Apartment House—Porterville—Architect B. G. McDougal, Sheldon Building, San Francisco, is preparing plans for a two-story brick apartment house, for V. D. Knipp.

Mausoleum—Anaheim—Architect Charles E. Strobeck is preparing plans for a one-story reinforced concrete Mausoleum, to cost $50,000, for the Pacific Mausoleum Co., 262½ E. Center street, Anaheim.

Packing Plant—Sacramento—Architects Seadler & Hoen, Forum Building, are preparing plans for a three-story reinforced concrete packing plant for Swanston Packing Co.

Warehouses—San Francisco—Architect Constructing Quartermaster of Fort Mason is preparing plans for two three-story reinforced concrete warehouses to be erected at Fort Mason for the United States Government, to cost $166,000.

Club House—Los Angeles—Architects Hunt & Burton, Lougheed Building, Los Angeles, are preparing plans for a three-story brick club house for the Automobile Club of Southern California. The building will be erected on Figueroa, south of 16th street.

Hospital—Los Angeles—Architects Curtis & Farrell, Curtis Building, are preparing plans for a two-story, reinforced concrete building to be erected on South Hope street, near Jefferson Street, for the Methodist Hospital Association, to cost $400,000.

Hotel and Store—Petaluma—Architect Raymond Lane, is preparing plans for a three-story brick and steel hotel building for the Petaluma Development Co., to cost $60,000.

Hotel—Oakland—Architect Henry H. Meyers, Cole Building, San Francisco, is preparing plans for a seven-story brick and steel hotel building, to be erected on Clay and 16th streets, for Crellenon Realty Co., to cost $150,000.

Church—San Diego—Architect H. M. Patterson, D. T. Johnson Building, Los Angeles, is preparing plans for a six-story reinforced concrete church building, to be erected on San Diego, to cost $150,000. The owner, Dr. B. Stauffer, Salt Lake City.

Hotel—Los Angeles—Architects Morgan, Walls & Morgan, Van Nuys Building, Los Angeles, are preparing plans for a four-

story brick and steel hotel building, to be erected on Pico and Hope streets, for Victor Penet.

Residence—San Francisco. Architect Houghton Sawyer, Shreve Building, is preparing plans for a two-story brick and stone residence for Mr. E. Sheldon Porter, to cost $60,000.

Residence—San Francisco. Architect Chester H. Miller, Foxcroft Building, is preparing plans for a two-story frame residence, to be erected on the corner of Hyde and Lombard streets, for Mr. Burellius, to cost $5,000.

Residence—Riverbank. Architect Ralph P. Morrell, Odd Fellows Building, Stockton, is preparing plans for a one-story residence frame to be erected at Riverbank and costing $2,500.

Residences—San Francisco. Architect E. E. Young, 251 Kearny street, has prepared plans for two two-story frame residences to cost $5,000 each for Thomas Scoyle, 363 14th avenue.

School Buildings—Oakland. Architect J. J. Donovan, Security Bank Building, has prepared plans for two-story Class A school building, to be erected for the city of Oakland, and to cost $150,000.

School Buildings—Glendale. Architect Norman F. Marsh, Broadway Central Building, Los Angeles, has prepared plans for two two-story brick and steel school buildings to cost $75,000, for the Glendale School District.

Theater—San Francisco. Architect William Beasley, 127 Montgomery street, has prepared plans for a two-story Class A theater building, to be erected on Market street between Fifth and Sixth streets, for a local corporation, and to cost $150,000.

Church—Los Angeles. Architects J. C. Austin and W. C. Pennell, Wright & Callender Building, Los Angeles, are preparing plans for a reinforced concrete church building, to be erected on Sixth and Hill streets, for the First Methodist Episcopal Church, and to cost $250,000.

Bank Building—Redondo. Architect L. B. Pemberton, Auditorium Building, Los Angeles, is preparing plans for a two-story reinforced concrete bank building.

School Building—Venice. Architects C. H. Russell and Fielder Slinglorff, Associated Security Bank Building, Los Angeles, have been commissioned to prepare plans for the New Polytechnic High School building at Venice, the construction to be brick with plastered exterior and gray tile roofing, to cost about $150,000.

School Building—Santa Paula. Architects Allison & Allison, Hibernia Building, Los Angeles, are preparing plans for the new high school building to be erected at Santa Paula, to cost $70,000.

Church—Los Angeles. Architect Robert H. Orr, Van Nuys Building, is completing plans for the Boyle Heights Christian Church, to be erected on Second and Breed streets.

Hospital—San Francisco. Architect Lewis P. Hobart, Crocker Building, has completed plans for a new hospital for the University of California, to be erected on the heights back of the Affiliated Colleges. This structure will cost about $600,000. The same architect is preparing plans for an addition to the Crocker Building on Market and Post streets.

Apartment House—San Francisco. Architects Havens & Toepke are preparing plans for a large apartment house to be erected for the Cunio Estate, on the corner of Union and Columbia avenue, costing about $240,000.

Residence—San Francisco. Architect Willis Polk, Merchants Exchange Building, has prepared plans for a two-story frame residence to be erected on Pacific avenue, near Walnut, for Mrs. Katherine P. Hooker, to cost $35,000.

Hotel Building—San Francisco. Architect Charles J. Rousseau, 46 Kearny street, is preparing plans for a four-story reinforced concrete hotel building, to be erected on California, near Kearny street, to cost $24,000.

Hotel Building—San Francisco. Architect Joseph Kahen, 45 Kearny street, is preparing plans for a four-story brick and steel hotel structure, to be erected for Harry Rosenburg on Hyde street, near Sutter, to cost $35,000.

OREGON

Hotel Building—Portland. Architect Robert F. Tegan, Morgan Building, has plans completed for the new hotel building to be erected at Second and Couch streets, for A. L. Parkhearst and costing $35,000.

Factory Building—Portland. Architects Doyle & Patterson, Worcester Building, have completed plans for a two-story brick factory for George M. Eastman. Structure to cost about $15,000.

City Hall—Klamath Falls. Bonds are to be voted on November 24th for $50,000 for the erection of the new city hall. Preliminary plans have been furnished by a Portland architect.

School Building—Gresham. Bonds have been voted for the new school building, and money is now available and architect will soon be chosen to make plans.

Natatorium—Seaside. Work will begin soon on the $30,000 natatorium to be erected at Seaside for J. E. Oats.

Garage—Portland. Architect C. A. Houghtaling, 507 Henry Building, has prepared plans for a large garage and stable building to be erected on the home site for Robert J. O'Neil to cost $20,000.

School Building—Bend. Architects Sweatt, Levesque & Co., Spokane, Wash., have prepared plans for a $20,000 school building to be erected near Bend for District No. 12, Crook County.

Natatorium—Bay Ocean. Architects Camp and DuPuy, 426 E. Alder street, are preparing plans for a large natatorium to be erected at Bay Ocean for the Bay Ocean Natatorium Co., to cost about $35,000.

School Building—Portland. School Architect T. A. Naramore is preparing plans for a one-story school building to be erected at E. 30th and Harrison streets.

Hotel and Store Building—Portland. Architects Foulkes & Hogue, Oregonian Building, have completed plans for the three-story hotel and store building to be erected on Broadway and Everett street for Cord Sengstake.

Creamery Building—Portland. Architects Emil Schacht & Son, Commonwealth Building, have prepared plans for the three-story building to be erected on the East Side for the Townsend Creamery, to cost about $20,000.

School Building—Yamhill. Architects Jacodeberger & Smith, Board of Trade Building, have prepared plans for a three-story brick school building, to be erected at Yamhill, and costing $20,000.

WASHINGTON

State School—Cheney. Architect J. A. Zittel, Spokane, is preparing plans for the $300,000 State Normal School to be erected here.

Theater Building—Seattle. Architect W. A. Penticost has completed the revised plans for a reinforced concrete theater for F. N. Hallet, Alaska Building. Will cost about $50,000.

Apartment House—Seattle. Architects Bebb & Mendel, Denny Building, have been commissioned to prepare plans for the $50,000 apartment house for Louis Williams. It will be a four-story concrete building.

Cold Storage Plant—Seattle. Architects Saunders & Lawton, Alaska Building, are preparing plans for a one-story fireproof concrete kitchen and cold storage building at the Insane Asylum at Cedro-Wooley. The structure costs $25,000.

Apartment Building—Seattle. Architect Robert E. Knipe, Henry Building, has completed plans for a three-story frame and brick veneer apartment house to be erected at a cost of $36,000.

Tacoma—Architects Heath & Gove have been commissioned to prepare plans for a Greek Theater to be erected at Los Angeles, to cost $125,000.

Residence—Architect W. N. Somerville, White Building, Seattle, has been commissioned to prepare plans for the proposed Palatio residence of E. T. Rogers of the B. C. Sugar Refinery, which will cost $400,000.

Gymnasium—Tacoma. Architects Heath and Gove have been commissioned to prepare plans for a three-story reinforced concrete gymnasium for the Stadium High School at a cost of about $50,000.

Hotel Building—Reardon. Architect J. R. Burrell, Spokane, has prepared plans for a two-story brick hotel building to be erected for Jadez Switzer.

Residence—Seattle. Architect David J. Meyers, Central Building, is revising plans for the construction of the $15,000 home of Dr. H. V. Wirdermann at Lake Forrest Park.

Theater Building—Spokane. Architect E. W. Houghton, Collins Building, has been commissioned to prepare plans for a two-story fireproof theater building for Alex Parlsen, Spokane, to cost $100,000.

Theater Building—Wenatchee. Architect J. A. Cruetza, New York Block, Seattle, has been commissioned to prepare plans for the two-story concrete theater building for J. B. Ferguson, to cost about $30,000.

Brewhouse—Seattle. Architect Carl Siebrand, Arcade Building, has completed plans for making alterations on the present and constructing a four-story steel and concrete addition to the brewhouse of the Seattle Brewing & Malting Co., at a cost of about $10,000.

Fraternity House—Seattle. Architect Harlan Thomas, Eiler's Building, has completed plans for a two and one-half story frame Fraternity House for the Delta Kappa Epsilon, at the cost of $20,000.

BRITISH COLUMBIA

Court House Addition—Architects Gardiner & Mercer have plans prepared for the proposed Court house Addition in New Westminster addition, and it is expected to cost about $70,000. The same architect has prepared plans for a hotel building for Miller & Jewhurst, to cost about $20,000.

Theater—Vancouver. Architect J. F. Dollmeier, 319 Pender street, has completed plans for a theater building to be erected on Main near Keefer street, for the Orpheum Circuit.

Hotel—Prince Rupert. Architect F. M. Rattenbury, Victoria, has prepared plans for the proposed million dollar Grand Trunk Pacific Hotel Building to be erected in Prince Rupert.

Court House Addition—Vancouver. Architects Dalton & Eveleigh, 815 Hastings street, have prepared plans for the new east wing for the Provincial Court House, which will cost about $300,000.

Gymnasium—Vancouver. Architects Maclure & Fox, Carter Cotton Building, have prepared plans for a two-story gymnasium building for the Western Residential Schools Limited on 28th avenue, to cost $6,000.

Hotel—Port Coquitlan. Plans have been prepared by Architects Parr, McKenzie & Day, Vancouver Building, for the Coquitlan Terminal Co.

School—Victoria. Architect J. C. Keith has prepared plans for a new primary school building, which will cost about $23,000.

UTAH

Hotel Building—Logan. Steps are being taken for the erection of a large hotel in this city that will cost about $150,000.

City Hall—Salt Lake City. Architect Raymond Ashton has prepared plans and is ready to receive bids on the new $25,000 city hall to be erected in the La Grande Ward.

Business Block—Salt Lake City. Decker & Patrick, wholesale dry goods company, will erect a modern five-story fireproof building on West Second South, between West Temple and First West.

School Building—Milford. According to the State Superintendent of Schools, Melson, it is almost certain that a $100,000 building will be erected here.

Carnegie Library—Price. Plans have been prepared for a Carnegie Library in this city by Architect Miles E. Miller, Sharon Building, Salt Lake City.

Office Building—Salt Lake City. Architects Young & Sons, Sharon Building, have completed plans for the Latter Day Saints Church office building, to be erected on South Temple, at the cost of about $500,000.

Residence—Salt Lake City. Architect Frank Moore, Newhouse Building, has completed plans for a new residence for H. C. Goodrich, to be erected on Fererel Heights, to cost $6,500.

Residence—Tooele City. Architects Cannon & Fetzer, Templeton Building, Salt Lake City, have prepared plans for a new residence to be prepared for Dr. T. A. McBride, to cost $35,000.

COLORADO

Church—Denver. St. Thomas Episcopal Church of this city will make efforts to raise funds for the new church building.

Bank Building—Denver. The Colorado National Bank has plans practically completed for the erection of the combined office and bank building at 17th and Champa streets, to cost $1,000,000.

Bath House—Denver. Architects Edbrooke & Burnham have completed plans for the Denver Bath Co. for the erection of a bath house at 14th and Lincoln streets, to cost $90,000.

Sugar Factory—Colorado Springs. Plans are now on hand for the erection of a sugar factory, to cost $750,000, to be built at Delta, Colorado, by McCandless interests.

Memorial—Denver. According to Mrs. Charles Dennison, work on the construction of the H. S. Dennison Memorial Building, to be built by Mrs. Dennison in memory of her son, on the campus of the University of Colorado, to cost $25,000, will start at once.

MISCELLANEOUS

Residence—Boise, Idaho. Plans have been prepared to erect a two-story frame residence for W. E. Pierce. Elis Addison, to cost $7,000.

Public Building—Pocatelli, Idaho. Plans for the construction of the new Pocatelli Federal building have been revised, and new bids will be called for soon.

Lodge Building—Great Falls, Mont. Plans have been prepared for the erection of a new Masonic Temple, to be located at the corner of Central avenue and 9th street, to cost $80,000.

Court House—Kingman, Ariz. Architects Lescher & Mahoney, Phoenix, have prepared plans for the erection of a new court house here. The building will cost about $75,000.

Hotel Building—Burley, Idaho. $20,000 has been raised toward the $75,000 required to rebuild the Burley Hotel, burned last February.

Lodge Building—Vernuton, Nevada. Architect Fred De Longchamps, Reno, Nev., has been commissioned to prepare plans for the new lodge building for the Odd Fellows of this city.

School Building—Bisbee, Ariz. The School Board of this city will erect a new high school building that will be three stories, built of stone and cement, including equipment for manual training, with special machinery for all kinds of work and the latest gymnasium equipment.

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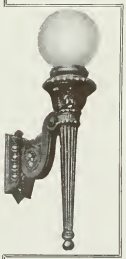

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VOLUME SIX
NUMBER THREE

DECEMBER, 1913

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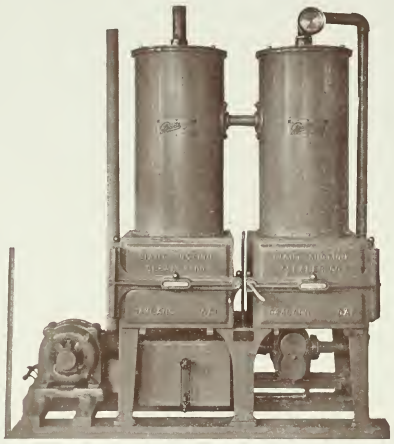

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VOLUME VI — SAN FRANCISCO, CALIFORNIA, DECEMBER, 1913 — NUMBER 3

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Current Comment

The Pacific Coast Architect is the official organ of the San Francisco Chapter American Institute of Architects.

❖ ❖ ❖

Expanded Cork for Cold-Storage Insulation

Expanded cork slabs are being marketed by a London concern for use in cold-storage insulation. Natural cork is expanded by a special process to more than double its original volume, with a corresponding enlargement of the minute cells in the cork which contain the insulating cushions of still air. The result is a much greater volume of still air for a given quantity of solid matter, which increases the insulating capacity quite considerably.

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❖ ❖ ❖

San Francisco Building Operations

November is usually the saddest month of the year, not only in autumn of the Eastern States, but so far as the building industry is concerned throughout the country. For then the season's rain begins and there is a general wind up of the work on hand and a cessation before the next year's work begins. This year is no exception to the rule. Contracts for construction work of all kinds let in San Francisco for the past month amounted to $1,555,232. Of this $1,350,339 was for private work and $204,893 for city construction. Of the private work the following division is made: Brick and fireproof buildings, $380,455; frame construction, $554,776; alterations and additions, $156,817; Panama Pacific contracts let, $257,291.

But few contracts were let for large buildings during the month, the total amount for fireproof construction being smaller than any month since November, 1910. So that to the lack of important buildings being projected is primarily due the smallness of the building record rather than general building that has caused the total to be less than the average.

Compared with former years the record for November during the past decade is as follows:

November, 1904	$ 806,297
November, 1905	1,159,463
November, 1906	6,733,985
November, 1907	1,482,765
November, 1908	2,504,180
November, 1909	1,807,073
November, 1910	805,938
November, 1911	2,647,318
November, 1912	2,160,045
November, 1913	1,555,232

While this year's total fell behind that of last and the year before, still it is not far below the average for the last ten years and is notably more than 1904, 1905, 1907 and 1910. So that on the whole it is about an average for the same month during the past decade.

Compared with the preceding months of the present year the record is as follows:

1913

January	$2,655,990
February	2,736,813
March	3,574,370
April	3,327,784
May	2,816,385
June	2,830,306
July	3,826,198
August	2,844,045
September	2,420,580
October	2,152,000
November	1,555,232

The above figures are the total record of all the construction within the city limits of San Francisco. While there is sometimes great fluctuations from month to month, the general average is much above the two million-mark. Government work and harbor construction has been an important part of the total of some months, while in others it has been entirely lacking. Altogether the figures for the last eleven months amount to $33,774,677. This is a considerable amount of money to be spent in building construction in these hard times and in general so far as figures go the builders of San Francisco can not complain.—Daily Pacific Builder.

At the Gates of Life and Death.—Carnegie Prize, Academy of Design, 1912.

Considerations on Mural Painting

By EDWIN HOWLAND BLASHFIELD, N. A.,
Honorary Member A. I. A.

(An address delivered before the Forty-sixth Annual Convention of the American Institute of Architects.)

The Allied Arts have accomplished something in the United States; why have they not accomplished more?

One man tells us that it is because the public is indifferent; I do not agree with this. Another says that it is because the artists are indifferent; again I disagree. I should affirm, instead, that it is because public and artists alike lack **education**, the kind of education which comes from experience. The public has not yet had enough experience in watching the growth of buildings which are great decorative entities; that is to say, which are **beautiful**, first, in their architecture; second, in their sculpture; third, in their painted surfaces. It is only by continued visual experience of such growth that **any** public can in turn grow truly appreciative of real decoration.

Now real decoration means a result which embraces everything; the color of the stone; the latter's proportions, lines and forms; the shapes, masses, colors, lighting and distribution of the sculpture and painting which adorn the building. Without such decoration, no people can possess a civilization of the highest order, for to the highest form of civilization **beautiful** cities are as essential as clean cities or well-governed ones. And the public is not indifferent; the average individual is not indifferent; he may even honestly think that he is, but it may be that it is only because he is more or less uneducated.

The artist also is relatively uneducated, and by the artist I mean the architect, sculptor, and painter. What, you say, our architects, with their enormous fund of all-round knowledge, uneducated? Why, Mr. Blashfield, you have devoted pages of a lecture to the various kinds of experience and capacity demanded of, and furnished by, our American architects. You have quoted Kipling's Terence Mulvaney in "My Lord the Elephant," who, when the sergeant says to him, "Are you a man or a miracle?" replies "Betwixt and betune"; and you have averred that the architect also must be almost a miracle of general knowledge.

So I have said it, and I say it again; but I reaffirm that along certain lines the architect is relatively uneducated. And the modern sculptor and painter, who may be as clever as Rodin, or most brilliant in technique, modeling, chiaro-scuro, and color, are they uneducated? Yes, they are along certain lines, the lines of the kind of experience which is born of co-operation.

A few architects, sculptors, and painters have been struggling to co-operate, and they have learned something and accomplished something, even a very great deal; but they have not yet had time to co-operate long enough to attain consummate experience, and it is only when consummate experience has set wheels under the whole progressive movement, and oiled them, too, that we shall move forward smoothly along the whole line.

The American Academy of Fine Arts in Rome is fostering this kind of co-operation. I believe that it is the very brightest point upon the horizon, and every architect, painter, and sculptor in the country should try to strengthen its hand. For when intelligent co-operation shall have set the seal of varied yet homogeneous beauty upon any building, the great public, so-called indifferent, will find it out and will applaud. For the average individual is not indifferent to beauty. As a child he loves bright colors; as a savage he plasters them upon himself. This does not necessarily infer love of beauty, you say. I think it does, in embryo.

The other day floods destroyed some little towns; people who went with helping hands to them told me that the poor and uneducated sufferers lamented most over the destruction, not of useful objects but of their pitiful little ornaments, their plaster lambs and cheap pictures.

Some people, some of our men even who talk to the public, assume a pose of indifference toward art, with perhaps the idea that it makes them appear manly and democratic. I have heard of a public man who, fairly bounding from his seat, replied to his inter-

locutor, "What, you mean to tell me that you ask the Government to spend public money on obtaining an artistic effect?" inferring, by this explosive exclamation, the meretriciousness of art as compared with what he denominated realities. Yet these very men while denouncing art as a national asset demand it in their homes.

Perhaps you demur and say, "But do they really demand it; are they not, after all, content to live in Jeffersonian simplicity?" I reply that, first, Jefferson loved and cultivated the arts; and second, I say again that in daily life these same men demand such background and surrounding as can be furnished only by the growth of the Arts.

Study for a Head in Decoration of Wisconsin State Capitol.

If you wish to prove this, take a simple and homely example. Seat one of these men at his own table and let the maid serve him his beer in a teacup and saucer; or, if you will, his tea in a stein. Some red Burgundy or some Mumm's extra Dry in a teacup would do as well to prove my point. "Oh come," you say, "this is unfair, all this is only a matter of habit."

Not a bit of it, the habit is born of a practice which is based on expediency. Decoration comes from the same root as decorum; it is that which is decorous and fitting, and this suitability has been evolved by long, long experience in a series of forms, which art has clothed at once with interchangeable appropriateness and beauty. There it all is in a nutshell—or rather in a teacup.

You may pass on from the beauty of a good drinking vessel—be it even a gourd—to the beauty of a cathedral, and the individual who is capable of taking pleasure in a neat and appropriate table-service is capable of appreciating something, at least, of the beauty of a Parthenon, and may be educated into such appreciation. From the good shape of a spoon he may climb to the comprehension of the beauty of a tower, and from the conscious enjoyment of the good color of a rough earthen plate to conscious enjoyment of the myriad colors in a great painting by Paul Veronese.

I know a man, a government official, who was a contemner of white linen in favor of the manlier flannel shirt. Any warm and rainproof building was good enough to transact public business in; to expend upon anything more than was demanded by shelter was undemocratic, was wicked folly indeed. Today that same man is an enthusiastic, even a passionate, advocate of the very best art, in architecture, sculpture, or painting, as applied to public monuments. One day on his road to Damascus, this man was taken into a great decorated building, and then new Saul's eyes were blinded by a revelation and then opened again, so that he forever ceased from his persecutions, whether of linen collars or appropriations for public embellishment. "Do you tell me," he said, "that the people of my native state can have such things at home merely by paying money for them?" Some of you gentlemen—we are all Sauls until we are converted—will say, "Where can you find in America a decorated building capable of working such miracles?" I reply, that is another story, but I should be very willing to talk of it, had I time. In order to be stimulated, some of us require more, some of us less. This man had found his dose, and it made him a useful friend to the Arts.

To sum up, the first obstacle and the one which might seem insuperable—the alleged indifference of the public to serious art—can be gradually overcome by object-lessons in buildings, sculpture, and paintings. Such lessons will appeal, only eventually it is true, but also infallibly, to the natural liking for a pleasant and appropriate material background to daily life, a liking which can gradually develop into a really high sense of beauty.

Into this education of the public must enter a thousand details of relations between the artist and this same public, especially between the artist and the building commissioner, details demanding tact and persistence on the part of the artist, thought and discussion on both sides. To consider such details would require ten times the half hour that I can spend, today, in talking.

Let us pass on from the alleged indifference of the public to the alleged indifference of the artist, and to his very real lack of education in what one might call mutuality of effort or, more simply, teamwork.

In providing our object-lessons for the public, we must so strengthen and assure ourselves that the lesson shall convince, and this **feste burg** of assurance we may find only in intelligent co-operation.

Now the first and principal bar to co-operation is undoubtedly the dread of each man lest he be interfered with, perhaps, in some minor ways—even overshadowed by collaborators. But if he is a first-rate man, and I am talking about first-rate men and first-rate art, this fear is unjustified.

The architect commands the field. He plans and builds the monument which is to be carved and painted, and he will necessarily stand as high as anyone, probably much higher than anyone in the ensuing achievement. Let us take the field I know best, that of painted decoration. The mural painter's relation to architecture is to be understood but is still utterly misconceived by many. It is true that already in the seventeenth century

the artist had commenced to cultivate his personality with a consciousness hardly known to Greek and Gothic workers, but all that was as nothing beside the present cultus of what the modern artist names his individuality, his temperament. The student in the schoolroom ceases working upon his so-called study, leaving it a daub lest he should lose his "personality out of it." Merely to differ as widely as possible from others in his rendering of nature seems to be what many an artist accounts most creditable today. His personal idiosyncrasies must stand out; if they do, he believes that his work is real and valuable. Such a panel is by X, the great master; its owner sets it upon an altar and we bow. Tomorrow it is proved to be by a pupil, and it is sent to the attic. In the attic, if the light be good, the panel is as beautiful as when it was upon the altar, but unfaith has destroyed "the personality of it" —sic transit gloria. As the newspaper rhymster said of the wax bust in the Berlin Museum, credited to Leonardo da Vinci by certain experts, and by others to Lucas, the modern sculptor:

Central Figure in Dome Crown, Wisconsin State Capitol.

"If Leonardo fashioned it, it is a masterpiece;
If Mr. Lucas moulded it, it is a lump of grease.
Now, I support no theory, I take no person's part;
I only put the query, pray tell us, what is art?"

This makes us smile at experts; nevertheless all honor to them, to the investigators who teach us to know our old masters better and arrange for us noble museums.

But every work of art is not necessarily an individual effort, the pure and undiluted expression of one man's personality. Art is also rounded beauty, a result, the results, if need be, of many minds working together, and in any great building it is assuredly the product of that triune force which comes from the minds of a trinity; for the Aladdin's lamp of achievement must be rubbed three times—by architect, sculptor, and painter—before the miracle works.

And herein lies the prodigious difference between decoration and easel painting, two branches of art equally admirable, touching each other at some points, widely asunder at others.

To whatever will make the ensemble more beautiful, the artist must consent. Not only must he be receptive to influence from past and present, but he must also accept assistance at the hands of others. If fifty assistants will help to a better result, he must have them all.

To what a distance have we come from the ground occupied by the expert, who finds evidence in the panel that it was painted, not by Botticelli, but by a man directly inspired by Botticelli, and who therefore sets it aside as hopelessly inferior. But—and here is the point —the inspiration is from the great master, and, in working with other men toward the creation of a harmonious whole, the great master does not sink his personality; he fuses in it what he draws from the minds and hands of others. The decorators who have had the most assistance have been among those endowed with the most prodigious personality.

Pinturicchio's Borgia rooms were produced by an army of workers, but are they not different from any others? The ceilings of Veronese's pupils cannot be distinguished from those of the master, but do they not proclaim Venice and Paolo Caliari as with a trumpet? Rubens is the archetype of the man who made great pictures with other men's hands, but is any personality more colossal than that which could influence schools of north and south and west, and could pass the scepter down through the hands of Vandyke to Gainsborough and all sorts of lesser men; who could open the way, in fact, to modern art? Some later critics have spoken easily of Raphael as without personality, because he accepted the ideas of others. But in arrangement and composition—those all-important elements of decoration—is there any more varied or sustained personality than Raphael's? Composition is combination. Raphael combined what he saw in men and women, books and pictures, and after they had passed through his brain they were quite sufficiently alembicated.

So much for some of the famous and successful team-workers of the past, about whom volumes have been written and in whose footsteps we must tread. For whatever may be the case with easel painting, the ground which the mural painter occupies is cleared for team-work; architect, sculptor and painter are all in harness together, and it is concerning mutuality of effort between the architect-leader and the mural painter that many of us can speak with some experience.

The mural painters—A, B and C—by the architect's from the moment that he designs his building, his staff should be at his side, awaiting orders. When he plans the drawings of his great rooms, sculptor and painter should be ready at his elbow, if he asks them, to say, in distributing their work, how he may so place it that they may help him most effectively. And their suggestion must prove helpful, for no architect, sculptor or painter ever lived so clever that he could not profit by the knowledge of an expert in a sister art.

Sculptor, and painter, too, might go with the architect even to the quarry, for, if the architect knows the endurance of the stone and determines its constructive

Fragment of Decoration of Dome Crown, Wisconsin State Capitol.

destination, the painter can tell him much of its color value. It is the custom already to accredit sculptor and painter to the architect as aides, but too often these staff officers engage only when the battle is half over. Instead they should ride ahead of the skirmish line, even in reconnoissance to spy out the land, and with them should go glass men and metallic workers and carpet-makers and layers of pavement and designers of bronze fixtures, then you would have the material for real collaboration. When you do not have such intercommunication, what obtains? Something like this:

The mural painters—X, Y and Z—for the architect's directions have compared their original sketches to secure harmony. Later X goes to see Y and says, "Why, Y, you are treating your decoration in a warm orange tonality, your sketch was in cool gray. I have been keeping my decoration cool to harmonize with yours. What's the matter?" Y replies, "The architect was called away from the city, and while he was gone X, Z & Co., the firm who supply the woodwork, changed their minds and substituted red mahogany for gray Circassian walnut, so I had to change my tonality." Hinc illae lachrymae! Or, X is told to paint for a room with rich, deep tones of glass; he does so, and comes to find a room filled with light, clear glass. His colors are thereby made garish, his effect spoiled. Again he says, what is the matter? "Well," the glassmaker replies, "the building commission decided that they wanted a good deal more light in that room, and I had to give them their way."

Again, in one of our cities, a room was elaborately decorated at great expense. The whole effect depended upon the relief to the eye afforded by six big, clear panels of Caen stone. The clients, delighted with their room, celebrated it in print, had a reception and made a booklet. Presently they filled the six panels with full-length portraits of directors in black clothes, ruining their room. Now, if architect, sculptor and painter had been constituted into an advisory committee, as they are at Columbia University, for instance, they would have said, "But, gentlemen, your portraits will kill your room and your room will kill your portraits. You are canceling the value received from your architect, sculptor and painter." Such mutual protest would probably have averted the catastrophe.

"The Law." Panel in the New Courthouse, Wilkes-Barre, Pa.

In decoration mutuality is constantly demanded, and mutuality means self-sacrifice. You may say that, in demanding this, where both money and reputation are involved, we are counting upon a high degree of disinterestedness. I reply that the very highest ground is the only one to take and to maintain so long as the matter in question is the creation of that great stone symbol of our democracy, the Public Building.

Throughout history, the great decorated Public Building has been one of the most valuable assets of a nation, the stimulus of the indifferent, the educator of the ignorant, the teacher of esthetics, patriotism, and morals. Therefore the task and opportunity of our architects is prodigious. They are rebuilding the country; we have almost unlimited wealth, almost unlimited territory. If our artists do not rise to the situation, they will throw away what is the greatest opportunity since the Renaissance.—Journal of the American Institute of Architects.

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The First National Bank of Los Angeles

The First National Bank took possession of their new quarters in the I. N. Van Nuys Building at the southwest corner of Spring and Seventh Streets, on February 22nd, 1913.

The building was designed by Messrs. Morgan, Walls & Morgan, and was the crowning achievement of Mr. I. N. Van Nuys, who unfortunately did not live to see its completion. It is a class "A" building of the highest type, of excellent design, and most thorough construction, the first three stories being executed in granite and the superstructure in white terra cotta. The building is 155 feet on Seventh street by 170 feet on Spring street, and the Bank, to protect their future, have taken over the entire first floor, the space covered in the present equipment being 100 by 170 feet, with the entire basement and a large mezzanine space at the rear.

The entire interior of the Banking room and the equipment complete was designed and executed by the Weary & Alford Company of Chicago, who maintain a branch office at Los Angeles. It is the largest operation they have carried out, the erection covering a period of some two years and involving a tremendous amount of technical work and detail, the result of which is readily apparent.

The design of the interior is purely original and has a distinctive character, which is singular in the work of this firm. The lobby frontage accommodates forty-three wickets, private consulting rooms for the principal officers, and a commodious ladies' lounging space with private rooms and toilets adjacent.

The Bank have adopted and were, in fact, the originators of the Unit System of receiving and disbursing money, whereby the accounts are divided into alphabetical units and both the paying and receiving is handled in the same cage through two tellers' wickets. There are sixteen of these tellers' and four additional ones for the ladies' wickets, with two chief tellers' windows, so that there are practically ten complete banks, each with the bookkeepers immediately adjoining, and with this system the work is rapidly handled and there is no congestion in the lobby.

The Bank ceiling is some twenty-five feet high and the lobby is very impressive. In the center is a rookery of marble some fifteen feet in diameter, in which is maintained a splendid display of tropical plants on a large scale, which are typical of Southern California. There are eight marble endorsing desks with all the modern appliances, and two imposing double seats executed in marble, also an information desk with an attendant, who, with the uniformed officers, attends to the wants of customers.

The equipment of the cages is of the highest and most modern type comprising numerous appliances which are most essential in expediting the work of the clerks, and was executed by the Art Metal Construction Company of Jamestown, New York. The entire construction is of enameled steel and bronze. The counter tops are of imported linoleum with bronze edges. The sub-dividing partitions for these cages are of enameled steel and plate glass. There is no contrast whatever above the lower line of the glass and it is a remarkable fact that an object no larger than a lead pencil can readily be seen in looking through twelve of these cages. The cages are thoroughly ventilated and are provided with telephones, which are accessible to all of the clerks, currency guards, sliding signature cases, signal service, etc., and each cage has its own omnibus in which the funds of the day's transactions are securely locked and taken by private elevator to the cash vault in the basement.

The pavement of the entire counting and clearing house room is of cork tile one-half inch thick, laid in cement, and is noiseless and restful. The officers' spaces are overlaid with carpet, and the private offices with heavy rugs specially woven in Austria.

The pavement in the lobby is composed of inset panels of vitreous mosaic imported from Europe, rich in color and with borders of imported marble.

The interior of the banking room is composed largely of marble. The columns, twenty-one of them, are Tavernelle marble their entire height, and this same marble is employed in the treatment of the exterior walls of the room as well as the vestibules, the top screen of the counter line, the endorsing desks, seats, and other features of the lobby. The front of the counters, balustrades, and other parts, are of Jeune Fleuri, a French marble, and all of the bases are of Escallette. This marble work was manufactured by the Lantz Company of Buffalo, New York, and was executed by B. V. Collins of Los Angeles.

All of the metal work in connection with the counter proper, including all sign plates, tablets, etc., was executed by the Gorham Company of New York, and is of bronze thoroughly plated with gold, being, in fact, Gorham's standard gold plate. This process, while quite expensive, is regarded as a good investment for the reason that it is always gold, beautiful in color, and requires no attention. The modeling of this work is most exquisite. It is very carefully hand-chased and is, in fact, a piece of jewelry work throughout. The check receptacles, calendar cases, etc., for the endorsing desks, are also of gold and are most interesting in design and in modeling.

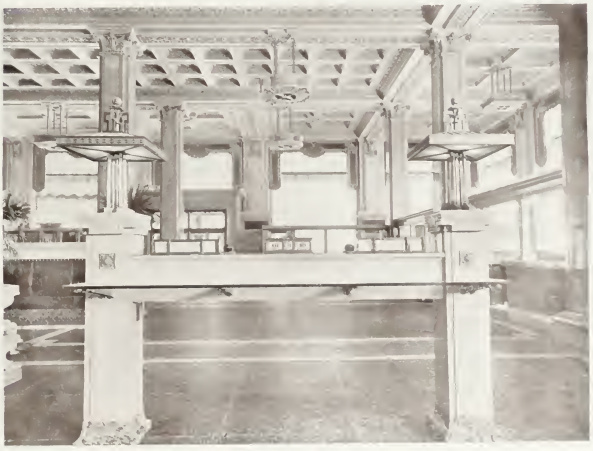
This branch of the work was executed by Matthews Bros. Mfg. Company of Milwaukee, Wis., and is an excellent example of their skill. The woodwork which occurs in the banking room proper is of quartered white oak fumed to a nut brown shade and finished in flat wax. This color is obtained by placing the wood in airtight kilns and subjecting it to the fumes of ammonia, which act on the tannic acid of the wood, giving it a translucent and very interesting effect.

The private offices are in genuine English oak, rich in figure and well dappled and is worked out in design with much cross banding and inlay work.

(Continued on page 422)

I. N. Van Nuys Building and First National Bank, Los Angeles, Cal.
Morgan, Walls, & Morgan, Architects, Los Angeles, Cal.

Banking Room.
First National Bank, Los Angeles, Cal.



Detail of Indenting Desk.
First National Bank, Los Angeles, Cal.

Rear Counter Line, Showing Cashier's and Assistant's Quarters,
First National Bank, Los Angeles, Cal.

Ladies' Department,
First National Bank, Los Angeles, Cal.

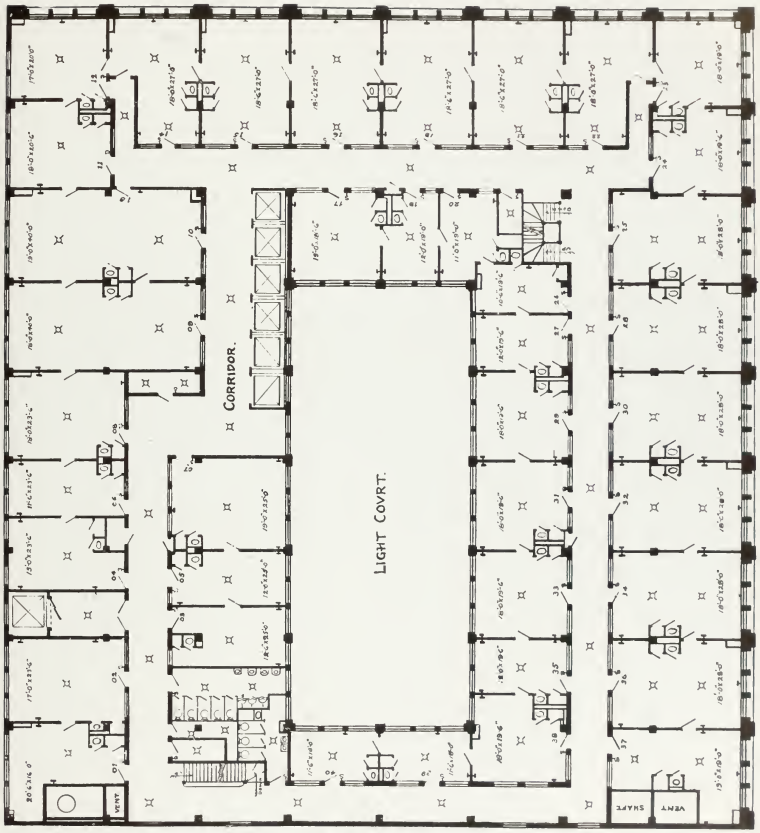
Directors' Room.
First National Bank, Los Angeles, Cal.

Cash and Security Vaults.
First National Bank, Los Angeles, Cal.

Detail of Fountain in Center of Lobby

Detail of Seventh Street Entrance

First National Bank, Los Angeles, Cal.



Typical Floor Plan.
I. N. Van Nuys Building, Los Angeles, Cal.
Morgan, Walls & Morgan, Architects, Los Angeles, Cal.

East Front View.

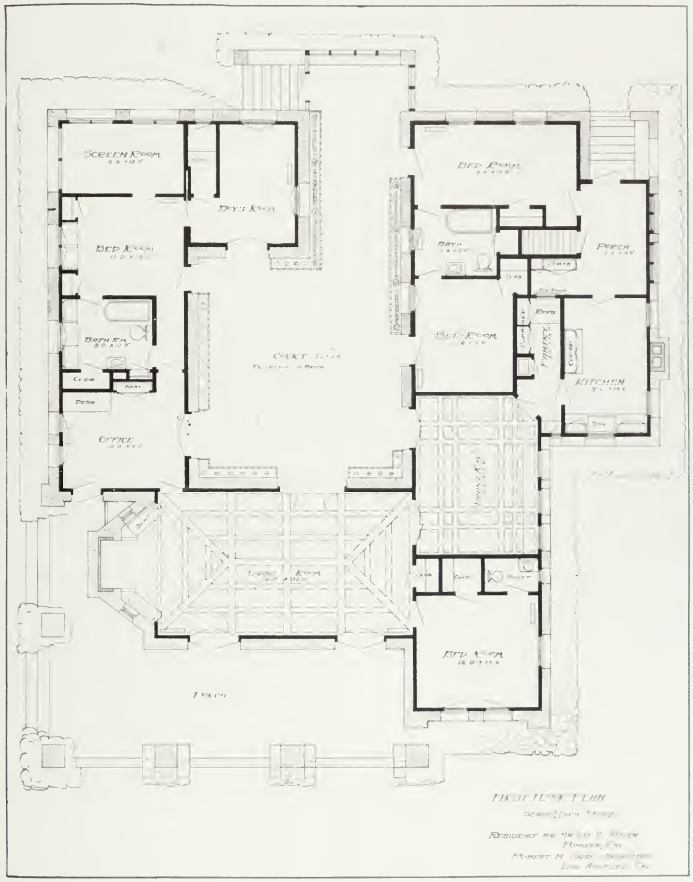
Residence of Mr. Lee C. Fitzer, Pomona, Cal
Mr. Robert H. Orr, Architect, Los Angeles, Cal

North East View.
Residence of Mr. Lee C. Perry, Pomona, Cal.
Mr. Robert H. Orr, Architect, Los Angeles, Cal.

Detail View of Porch.
Residence of Mr. Lee C. Perry, Pomona, Cal.
Mr. Robert H. Orr, Architect, Los Angeles, Cal.

Mantel in Living Room.
Residence of Mr. Lee C. Phipps, Pomona, Cal.
Mr. Robert H. Orr, Architect, Los Angeles, Cal.

View in Court.
Residence of Mr. Lee C. Phipps, Pomona, Cal.
Mr. Robert H. Orr, Architect, Los Angeles, Cal.


SCREEN ROOM
DRYS ROOM
BED ROOM
BATH
COURT
OFFICE
BED ROOM
BATH
PORCH
BED ROOM
KITCHEN
LIVING ROOM
BED ROOM
PORCH

THE AMERICAN INSTITUTE OF ARCHITECTS

The Octagon, Washington, D. C.

OFFICERS FOR 1914.

President	R. Clipston Sturgis, Boston, Mass.
First Vice-President	Thomas R. Kimball, Omaha, Neb.
Second Vice President	Frank C. Baldwin, Washington, D. C.
Secretary	D. Knickerbacker Boyd, Philadelphia, Pa.
Treasurer	John L. Mauran, St. Louis, Mo.

BOARD OF DIRECTORS

For One Year

Irving K. Pond, Steinway Hall, Chicago, Ill.
John M. Donaldson, Penobscot Building, Detroit, Mich.
Edward A. Crane, 1012 Walnut St., Philadelphia, Pa.

For Two Years

Bert L. Fenner, 160 Fifth Ave., New York, N. Y.
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H. Van Buren Magonigle, 7 West 38th St., New York, N. Y.

For Three Years

Octavius Morgan, 1126 Van Nuys Bldg., Los Angeles, Cal.
W. R. B. Willcox, Central Bldg., Seattle, Wash.
Walter Cook, New York, N. Y.

Auditors

Thomas J. D. Fuller, 806 Seventeenth St., Washington, D. C.
Robert Stead, 906 F Street, Washington, D. C.

San Francisco Chapter, 1881—President, G. B. McDougall, Russ Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, George B. McDougall, 235 Montgomery Street.
Date of Meetings, third Thursday of every month; annual, October.

Southern California Chapter, 1894—President, Robert B. Young, 701 Lankershim Building, Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Bryne Building, Los Angeles.
Date of Meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, Morris H. Whitehouse, Wilcox Building, Portland, Ore.
Secretary, Ellis F. Lawrence, Chamber of Commerce Building, Portland, Ore.
Chairman of Committee on Public Information (not known).
Date of Meetings, third Thursday of every month (Portland); annual, October.

Washington State Chapter, 1894—President, Charles H. Alden, Crary Building, Seattle, Wash. Secretary, Arthur R. Loveless, 601 Colman Building, Seattle, Wash.
Chairman of Committee on Public Information, Chas. H. Alden, Cary Building, Seattle (till further notice send all communications to A. L. Loveless, 620 Colman Building, Seattle.)
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November.

Forty-Seventh Annual Convention of American Institute of Architects

By William Mooser.

The Forty-seventh Annual Convention of the American Institute of Architects held in New Orleans, December 4th, 5th and 6th, was one of the most representative gatherings of the profession ever held and one of the most interesting, and not the least of all things of interest was the City of New Orleans with its many fine old examples of architecture which it is to be hoped the effort already started by the local chapter will be successful in the preserving of these old land marks which stand today as evidence of the past and are only too fast decaying. In differing from other conventions held heretofore it was notable in that the future management of the institute will be greatly changed by the advent of an executive (paid) officer who will devote his entire time and attention to the increase of the work of the institute.

This change in the internal management was made necessary by the ever growing activities along the many lines of interest the profession is endeavoring to promote in its relation to the public welfare as well as to the profession itself. Few indeed are the architects that realize the vast amount of work done by the institute and by those architects who serve on committees during the year without hope of pecuniary reward for devoting their time to matters for the good of all. The change will of necessity entail additional expense and the by-laws were amended so that an Associate member now paying $15.00 per year will henceforth pay $20, and a Fellow $25.00; an increase on each class of membership of $5.00 per year—but when it is considered the amount of good and the aid and help the profession gets through the work of the institute—the cost together with dues in the chapter is very much less than the average man pays in various clubs and societies and this increase should be given hearty support.

The question as to relation of chapters to the institute was laid over for one year to allow the committee to better study the situation. It is perfectly obvious to all that sooner or later there must come a change in this respect, and all chapter members shall become institute members and that new members and chapters shall be on probationary for two or three or even five years when they, too, shall automatically become institute members—or some other such plan to be worked out, it is to be hoped, by the time of the next convention.

An exceptionally fine and brilliant report was made by the Committee on Education and the particular attention of all architects, and it is to be hoped the public at large is called to it and when printed and circulated, architects should see that the public has access to it.

The code on competitions was re-framed with some changes, making it shorter and clearer—the New York

Chapter having prepared and printed a form of program which embodies all the essential parts of the code, and which it is to be hoped will be used by all, as it will greatly aid those wishing to institute competitions by giving them in concise form the practical machinery to start with.

It was gratifying to learn from all parts of the country favorable replies to the effect that it was the sense of chapters in general to continue the code in force.

Discussion on the schedule of charges was very extensively entered into, but after long debate the matter referred back to the committee for further study and report to the next convention.

In the institute's journal may be found interesting tables on charges in vogue in European countries and some suggestions for this country. It would seem from observation in the convention that the schedule as now issued was, in the main satisfactory with the possible exception of some understanding as to certain kinds of buildings. An explanation of a certain system of arriving at charges was very ably and certainly very interestingly put forth by the new president, Mr. Sturgis of Boston, giving in detail what the practice has been in his office for some years, it is to be hoped that his remarks will be printed in the "Proceedings of the Convention" to be soon issued, and no doubt will be found of interest to all, as one way of forming the basis of architectural charges.

In the matter of new officers elected, list of which is given at the head of this article, notice is directed to two features; one, the recognition of the West, Mr. Kimbal of Omaha, Mouran of St. Louis, Morgan of California and Wilcox of Washington State, making a very much desired division of the directorate in its make up.

Attention is called to the passing of Glenn Brown, for so many years secretary of the institute, again illustrating the course of events—Mr. Brown's long career as secretary is felt by all members of the institute with deep sympathy and regard, but it was evident the time had arrived when it was asking too much of any practicing architect to attend to the ever growing activities of the institute, and therefore the office of secretary was changed and made honorary and the incumbent a member of the Board of Directors and a paid executive officer to be appointed to do the actual work. The retirement of Mr. Brown and the election of Mr. D. Knickabacker Boyd of Philadelphia is one of the changes in the institute's policy.

The Institute Journal, published monthly was commended and its scope to be extended, all realizing the wonderful good effects of a circulating paper edited and managed by the institute in its relation to the public and the profession at large and with such men as the new secretary, Mr. Boyd, and the editor, Mr. Whittaker, we can look for a year of interesting events and an earnest plea is here made to all architects to subscribe for the Journal, and thus show in this small way at least their appreciation and give it their support.

It was the sense of the convention by vote as a recommendation to the convention to be held in Washington, D. C., in 1914 that the 1915 convention be held in Los Angeles and to so arrange the date that at the conclusion all may come and visit the Panama-Pacific Exposition in San Francisco, and it is none too early for both Southern California and San Francisco chapters to "get busy" and make this vote a reality in 1914 and also that each chapter join in arranging proper plans for a suitable reception at both cities. It was noted with pleasure the very cordial support to this recommendation given by the delegates from the State of Washington Chapter on the floor of the convention.

To each architect whether a member of the institute or of a chapter thereof a personal plea is made in calling his attention to the vast amount of time spent by certain individual architects throughout the United States in an unselfish work for the good of not only the profession, but to the people at large, for a better appreciation of things worth living for; for all must realize sooner or later what education for better art and architecture and the beautiful will accomplish, and it therefore behooves all architects to lend their help and a little of their "time" to assist in this great work by first joining the chapter in their respective districts and later by membership in the institute.

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San Francisco Chapter, A. I. A.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held at a down town cafe, on Thursday evening, November 20th, 1913. The meeting was called to order at 8:30 o'clock by Mr. Geo. B. McDougall.

Officers present were: Geo. B. McDougall, president; Edgar A. Mathews, vice president; Sylvain Schnaittacher, secretary-treasurer; W. B. Faville, H. A. Schulze, trustees, and many other members.

MINUTES

The minutes of the annual meeting of October 16th, 1913, were read and approved.

STANDING COMMITTEES

Sub-Committee on Public Information

Mr. Mooser made a verbal report on the activity of Mr. Knickerbacker Boyd on furthering publicity on behalf of the profession, and of the necessity of enlisting the aid of the press in promoting further publicity. He also called attention to a recent statement in the Thomas Magee Sons circular, which was misleading as to the results of a suit between the architect and his client.

Sub-Committee on Competitions, A. I. A.

Mr. Mooser reported for this Committee that there was nothing new, although many unauthorized competitions were being held, and that there had been more or less participation in the same by some members of the Chapter.

Note:

As no new appointments had been made to any of the other Committees, there were no reports.

UNFINISHED BUSINESS

Nomination of Officers

Mr. McDougall was placed in nomination for the office of President for the ensuing year by Mr. Faville. There being no further nomination for the office of President, the nominations were declared closed.

Mr. Schulze nominated Mr. Faville for the vacancy on the Board of Directors. There being no other nominess, the nominations were declared closed.

NEW BUSINESS

Mr. Frank T. Shea asked the privilege of withdrawing a resolution presented by him at the meeting of October 17th, 1912. He stated that his purpose in having presented this resolution was not that of advocating secession, but was asking for the remedying of certain conditions which he felt existed in the Institute. Mr. Shea also asked that the resolution be expunged from the records. The Secretary was directed to act accordingly.

The resignation of Mr. L. B. Dutton was read, and on motion duly made, seconded and carried, was accepted, and the Secretary was directed to notify Mr Dutton that his action carried with it his resignation from the Institute.

After some discussion it was decided that action on members entering unauthorized competitions be held in abeyance.

As all committees at the close of the fiscal year had been dissolved, the Secretary read a report which Mr. Thos. J. Welsh had intended to submit for the Publicity Committee.

ADJOURNMENT

There being no further business before the Chapter, adjournment was taken at 11:15.

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Southern California Chapter, A. I. A., Meet

The Southern California Chapter of the American Institute of Architects at its regular meeting, held at the Hoffman Cafe Tuesday evening, November 11th, elected the following delegates and alternates to the annual convention of the Institute to be held at New Orleans Dec. 2, 3, and 4: Delegates, Messrs. A. C. Martin, A. F. Rosenheim, Fernand Parmentier, J. C. Austin and Octavius Morgan, Jr. Alternates, Messrs. Frank Hudson, R. B. Young, John Parkinson, J. P. Krempel and S. Tilden Norton. The delegates were instructed to oppose the movement inaugurated by the New York Chapter to secure the removal of the national headquarters of the Institute from Washington to New York City. They were also instructed to vote against a proposed amendment which would permit the organization of auxiliary societies of architects conforming to Institute rules and regulations. This amendment is sought by a group of architects who withdrew from the San Francisco Chapter and formed an independent organization. It is expected another solution of the San Francisco controversy will be effected at the Institute convention.

Announcement was made that Mr. Frank Wilson Young, of the firm of R. B. Young & Son, a junior member, has been elected a regular member of the Chapter.

Mr. Theodore A. Eisen, chairman of the committee appointed to confer with a committee from the Master Builders' Association on matters of mutual interest, read a communication which the committee had sent to the Master Builders' Association committee outlining a basis upon which an agreement might be reached regarding the matter of taking and publishing bids. No reply had been received by the committee to this communication and action was deferred pending the answer of the Master Builders.

Mr. J. E. Allison, chairman of the committee appointed to arrange for a legal test of the law of 1872 requiring architectural competitions on public buildings reported that the committee had followed up a decision of the Sacramento Superior Court, which held the law to be inoperative, with satisfactory results. As a result of this decision the office of the district attorney of Los Angeles county has reversed its previous ruling upholding the law and the county superintendent of schools has concurred in the district attorney's opinion. Further steps will be taken to bring the matter to the attention of the state superintendent of schools, that uniform action regarding the law may be secured among the school officials throughout the state.

Following is a list of the standing committees appointed by the president for the coming year:

Committee on Membership: Frank D. Hudson, chairman; Frank Stuff, Julius W. Krause

Committee on Entertainment: John P. Krempel, chairman; Walter Erkes.

A. I. A. Sub-Committee on Public Information: Albert E. Walker, chairman; T. A. Eisen, C. E. Skilling

A. I. A. Sub-Committee on Competitions: J. Allison, chairman, A. F. Rosenheim, Myron Hunt.

Permanent Committee on Legislation: J. J. Backus, chairman; Lyman Farwell, A. C. Martin.

A. I. A. Sub-Committee on Education: John C. Austin, chairman; H. F. Withey, J. T. Vawter, D. C. Allison, W. C. Pennell.

Committee on Ethics and Practice: Theodore A. Eisen, chairman; Robert Orr, J. C. Hillman.

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Oregon Chapter, A. I. A., Elects Its Officers

Officers who will govern the Oregon chapter of the American Institute of Architects for the coming year were chosen at a recent meeting of the organization. The new officials are: Morris H. Whitehouse, president; Albert E. Doyle, vice president; Ellis F. Lawrence, secretary; Folger Johnson, treasurer; Edgar M. Lazarus and Frank Logan, trustees.

The chairmen of the following committees have been appointed by the president as follows: Folger Johnson, municipal plans and affairs committee; Frank Logan, of the committee; Andrew Fouilhoux, program and entertainment committee; A. E. Doyle, professional practice committee; William G. Holford, educational architectural league; D. L. Williams, legislative committee; F. A. Naramore, membership committee; Chester Hogue, committee on quantity survey; H. A. Whitney, building laws committee; Ellis F. Lawrence, publicity committee.

I. N. Lewis and Ellis F. Lawrence have been appointed delegates to the national convention of the institute to be held in New Orleans on December 2, 3 and 4.

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President's Report, Oregon Chapter, A. I. A.

EDGAR M. LAZARUS, F. A. I. A.

It is fitting that a brief resume of the work accomplished by the Chapter during the year now drawing to a close be made, and that we plan for the future.

In making certain pertinent suggestions for the Chapter's guidance, I feel that they will be taken in the spirit offered and, if approved, those who have the Chapter's interest at heart will co-operate to the end that the Oregon Chapter may be placed on that high plane of endeavor that is demanded by the noblest and best of our ideals and at the same time satisfy the exacting demands of an increasingly intelligent clientele. This can not be done without co-operation, and co-operation is the underlying principle upon which the American Institute of Architects is based.

The disturbing factor of the Chapter has been the old "bug-a-boo"—Competitions. Competitions and their proper conduct have ever been a thorn in the professional flesh. It is a vexatious problem and one which in all probability will never be solved to the complete satisfaction of the building public or to us. Nevertheless we can eliminate then continual abuse and mismanagement and the attendant prejudices and hard feelings that they carry in their train.

No one will dispute the fact that the members of this Chapter who were invited by the Secretary of the Treasury to compete for the proposed United States Postoffice building in this city, and who were consequently barred by the Treasure Department on calling

attention to certain clauses of the program which they considered improper, a program which was unanimously disapproved by the Executive Committee of the Institute, have by their action done more to elevate the profession before the public than any single instance in the history of this Chapter.

Your attention is called to the able report and findings of the Competition Committee, which merits your earnest consideration.

The City Government and other public bodies have called upon us with increasing frequency to give counsel to various and sundry matters pertinent to the community's welfare, an identification which will redound to the benefit of all of us.

Your President's tender of gratuitous service of an architectural committee to act as a clearing house for all ideas of a decorative nature in connection with the Rose Festival was enthusiastically received and accepted by the Rose Festival Association, which has delegated all architectural and decorative matters in all their details to this committee.

It is essential that we continue to pursue our civic activities with persistence and vigor. In this connection your attention is called to the fact that the Chapter was requested by the Chairman of the Committee on Civic Improvements of the Institute to appoint a local committee who would co-ordinate their activities with those of a National Committee which would keep us in constant touch with all matters of civic import that are being given universal consideration.

The legislative committee, co-operating with a similar committee of the Oregon Society of Engineers, endeavored to have the last Legislature enact a law limiting the height of buildings in this city, which bill was killed. Recommendation is made that we put up an unremitting fight until such a law is placed on our statute books.

The practice of granting special permits for buildings of a greater height than allowed by the code can not be too severely condemned, in view of our small city blocks and narrow streets.

It is well for us to inculcate in the minds of all, that while the owner of a building should not have his rights abridged, his neighbor has rights, and the public has rights, but that the good of the entire city is more important than that of the individual.

It is greatly to be deplored that nothing has been done to prevent the uneconomical condition that now obtains from the loss of light and air from the erection of unduly tall buildings in our midst, for even at this early stage of the city's growth the congestion in the downtown district is fast becoming intolerable. We should guard with greater care the only common natural resources in a city—light and air.

Mention is made of the convention of the Architectural League of the Pacific Coast, held here in June last, which was a gratifying success and which has done much to increase the public's interest in architecture in this community.

I recommend that the Chapter proceedings be reported in full and a transcribed copy sent to each Chapter member, for unless we arouse interest in the Chapter's proceedings, the Chapter is moribund and will shortly die a painless death.

The Chapter's value lies in the committee work and we must measure it by amount and quality of the work done by its chairman. No one should accept a chairmanship of a committee unless he is willing to make the sacrifice of his time and labor.

I recommend that the constitution and by-laws of the Chapter, the Circular of Advice, of Practices and Ethics, and the Code of Competitions be printed for distribution among the members.

Through rigid economy the Chapter has been able to meet the demands made upon it. It is essential, however, if we are to accomplish what we have set out to do, that we be supplied with the sinews of war. New members mean lighter burdens more evenly distributed. Let us all be missionaries and go forth and bring in as many new members as we can gather into our fold, and further let our activity be statewide.

No one thing that we want is going to be given us by an altruistic public. We must make up our minds to work and work hard, if we wish to see the Institute Code of Ethics the rule of every practicing architect in this state and the Institute's schedule of Charges conformed to, bearing in mind that no work succeeds so well, so easily, so quickly, as united effort.

In conclusion I wish to thank the officers and members for their loyal support during the past year.

Tacoma

Architects Elect

At the annual meeting of the Tacoma Society of Architects held recently in the offices of Architects Heath & Gove, Luther Twitchel was re-elected president, S. C. Irwin, vice president, and R. E. Rohbek, secretary and treasurer. These officers with C. F. W. Lundberg, will make up the executive council. President Twitchel was elected to the new office of mediator and will have as his duties the settlement of ethical disputes between architects, regarding their work, between architects and clients and to act in the capacity of an arbiter.

The First National Bank of Los Angeles

(Concluded from page 398)

The directors' room is in fumed oak and is located in the southwest corner of the room.

The furniture for the various rooms is of special design and most excellent in construction, being inlaid with canary wood and ebony.

The entrances of the Bank are imposing, those from Spring street and Seventh street having double sets of bronze doors, and there is also a set of doors from the elevator corridor for the convenience of tenants of the building.

The Seventh street vestibule is executed in Rookwood tiles of special design and coloring, the panels being inlaid with mosaic with gold embellishment.

The entire basement is devoted to the use of the Bank and is equipped in a very thorough manner. The woodwork is of selected mahogany, the floors of tile and marble. There is a large and complete safe deposit department executed in marble and mosaic with a handsome marble stair leading to the lobby above. This department has a series of coupon rooms, trustees' room, toilet, etc., and is well worth inspection.

The basement, including the sidewalk area, is 107 by 180 feet, and there is a liberal allotment of space for the various uses of the Bank. The men's locker and toilet rooms are very handsome and absolutely sanitary. The corridors are roomy. There is a large lunchroom and a kitchen which are operated by the Bank for the use of their employes, a large assembly room, library, gymnasium, janitor's room, stencil room, coin-counting room, and a room for waste paper. The waste for each day is put into a steel bin and held intact for thirty days so that if anything is lost it can be readily

discovered, and after thirty days the waste is baled and incinerated. The stationery and supply room is 36 by 43 feet, equipped with steel shelving, and is in charge of an attendant. The balance of space in the basement is devoted to a mechanical plant.

This Bank has followed the progressive idea of locating all their vaults in the basement and they are readily accessible by means of electric elevators and marble stairs. A most interesting feature is the cash and security vault, 20 by 20 feet, the sides, top and bottom being in full view at all times. The vault stands in a pit 3 feet 6 inches deep and is carried on legs or piers. The pit is lined with white matted tile, and a series of mirrors is so arranged as to reflect the bottom of the vault. The vault is of heavy reinforced concrete construction and has a cable system of electric protection, the cables being imbedded in concrete so that tampering of any sort sounds the alarm gong at the Bank, as well as at police headquarters. The vault has three compartments, one for securities and bonds, one for reserve, and a larger space for the current funds and tellers' omnibuses.

A new feature has been introduced in the construction of the door, the emergency door being incorporated in the door proper instead of being located elsewhere. This is both economical and practical and both doors are operated by quadruple time locks. The door is of the very highest type of construction and the entire vault has a 2½ inch laminated lining composed of alternate layers of chrome and Bessemer steel.

The book vault is quite tremendous in size, the extreme dimensions being 42 by 46 feet, and it is equipped with all the modern filing devices and shelving to properly contain the past files as well as the current files of the Bank.

The construction of the safe deposit vault is practically as described for the cash vault with the same type of doors, and the safe deposit boxes are of polished steel and of the most modern pattern. All of these vaults have tile floors and the interior of them is very imposing.

The mechanical plant is located in the basement and the Bank have installed every practical appliance for the rapid and accurate transaction of business and for the comfort and welfare of their employes and customers.

The forced draft ventilating and heating system is most complete. The fresh air comes from the top of the building through an intake shaft 6 by 9 feet, is forced through a water veil at a high velocity which eliminates all the dirt; is then bombarded against baffelers which eliminates the moisture and reduces the temperature of the air to 72 degrees. It is then forced into the room through ornamental registers located nine feet above the floor. In cold weather this air passes over steam coils. Another system exhausts the air at the floor line, passing it through tunnels under the basement floor and discharging it at the top of the building. Some of these tunnels are large enough to drive a span of horses through and there is a complete change of all the air in the banking room every ten minutes.

There is a pneumatic carrier system by means of which items are transmitted between clerks and officers.

A cold drinking water circulating system distributed ice water to various drinking fountains for clerks and visitors.

An interchangeable telephone system for both Home and Sunset phones is provided for the use of customers. There is also a complete signal service, and everything modern in the way of adding machines, coin meters billing, statement and canceling machines, etc.

The elevators are of the automatic electric type. There is also a pneumatic cleaning service extending to various points in the banking room.

The Weary & Alford Company have given the subject of indirect lighting much attention. The most interesting view of the interior of this Bank is at night and one of the views herein illustrated is a night view with an exposure of forty-five minutes without flashlights of any description, and serves to show what has been obtained by the indirect system of light. The light emanates from the suspended diffusers in the ceiling. There is not one electric lamp in sight and it will be observed that the diffusion of light is strong and even and without shadows. This is the modern system of lighting, is worked out on scientific principles, is economical, and restful to the eye.

The decorative work, rugs and draperies, were executed by Holslag & Company of Chicago, and much study was given to the color scheme. The general effect is of rather a monotone, but the plaster modelings are very rich and there is much underlying color which goes to the eye on close inspection. For example, there is a tremendous amount of pure gold leaf work, but it is all underglazed and lends richness and depth to the effect.

This interior is regarded as one of the interesting sights of Los Angeles, and the Bank takes pleasure in giving visitors every attention.

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Buildings Erected Since the Fire

Building records show that $233,217,767 has been invested in building construction since the fire of 1906.

This amount does not include the vast expenditures being made by the Exposition Company in the Fair Grounds, nor does it include the permanent improvements being made by the United States Government in the fortifications and administration buildings within the city limits; neither does it include the State's quota in harbor improvements, docking facilities, Armory and State Normal School extensions.

The following is a tabulated report of all building construction from May, 1906, to November 20th, 1913:

Class	No. of Bldgs.	Amount
Class "A"	103	$ 32,212,854
Class "B"	195	14,273,586
Class "C"	2491	77,898,358
Frames	23987	91,701,822
Alterations	20144	17,132,447
Total	47908	$233,217,767

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The Steady Subscriber

How dear to our hearts is the steady subscriber
Who pays in advance at the birth of each year—
Who lays down the money and does it quite gladly
And casts 'round the office a halo of cheer.
He never says, "Stop it; I can not afford it.
I'm getting more papers than now I can read"
But always says, "Send it; our people all like it—
In fact we all think it a help and a need."
How welcome his check when it reaches my sanctum—
How it makes our pulse throb, how it makes our hearts dance
We outwardly thank him—we inwardly bless him—
The steady subscriber who pays in advance.

—Inland Printer

School Ventilation and Open Air Class Rooms

The most important items for an Architect to consider in the designing and arrangement of school buildings are ventilation and light.

It is absolutely necessary for the health and mentality of school children to have an abundance of pure, fresh air, light and ventilation.

To compel children to remain in class rooms breathing and re-breathing the deoxidized, vitiated air which is bound to accumulate where proper ventilation of rooms is not maintained is, to say the least, a defect in school structure which should be corrected. It is physically and mentally impossible for scholars to be at their best in class rooms of this description. To devise ways and means for proper ventilation and light of class rooms, to secure the circulation of fresh air throughout every part and portion of the room and to expel the exhausted air at the same time, has been one of the principal aims and achievements of the Simplex Window Company in the designing of school windows.

As evidence of the pronounced success in this direction are the numerous school buildings in which these windows have been installed. Wherever it has become known and introduced, Architects and School Directors are specifying and using it. Throughout the states of California and Oregon it is in general use in school buildings. Arizona and Washington are becoming more familiar with its many excellent features and are also beginning to include it in their schools.

This is certainly an enviable reputation to secure in the short space of eighteen months, but like other meritorious inventions, which necessity demanded, it fulfilled its purpose in supplying light, air and ventilation, and therefore its demand is constantly increasing and its use for schools becoming general.

As the circulation of our "PACIFIC COAST ARCHITECT" reaches all points of the western United States and is generally read and used by the Architects and Builders, a short description of this excellent window, together with a mention of a few of its many good features would not be amiss and would certainly be of benefit to those who are interested in schools or similar structures.

The window is composed of one or more sashes, in schools usually three extending from level of floor up. The sashes are equipped with pivotal supporting arms attached to frame. Secured to the upper outside edges of sashes are pivoted sliding shoes which slidably engage grooves in side jambs. To operate the window the sashes are moved outwardly at the bottom to any angle desired, even to the full reversal of sashes, in which position it is easily and conveniently cleaned. In the opening and reversing of this window its sashes, in their movement, are confined to a position wholly outside of their seat in frame, which is an excellent and desirable feature. Their interlocking edges at meeting rail and tight contact with stops or rabbets of frame render them absolutely weather proof, and the sashes extending directly over each other present an even surface that can be easily and tightly weather-stripped. A shade attached to the inner side of the sash, when pulled down to cover same, forms and awning against the sun rays, and the sash can be directed to any angle to obstruct the sunshine, and still remain open to secure an abundance of fresh air. We might state that when the sash is opened say to an angle of 45 degrees, it catches and forces into the room a much greater volume of air than its actual opening would ordinarily admit.

College Park School, San Jose, Cal.—Architect, F. D. Wolfe, San Jose, Cal.

College Park School, San Jose, Cal.—Architect, R. D. White, San Jose, Cal.

These windows are usually arranged in clusters of four or five. The lower sash, which extends from the floor line, is frequently made a wooden panel, and when partly opened permits the foul air which accumulates at floor to escape through opening, which it does, and the space is constantly refilled with the circulating currents of fresh air entering from upper opening. It is apparent from the illustration that this is an ideal system of ventilation, practical and economical. The window speaks for itself. The appearance of the scholars in the illustration indicated health and mental capacity.

The shading of the open window sashes is certainly an expression of comfort and coolness that would appeal to all who are interested in the welfare of school children.

The screening of the window opening from the inside is also a welcome addition to the window.

This window gives the best results in ventilation and window construction at a moderate cost; it is a window in which cords and weights are not used for its operation. It is weather proof when in a closed position, and even when partly open it protects the interior when raining, thus allowing ventilation in stormy weather. It does not rattle and is noiseless in any position. Its metal fixtures are durable and rustless. In every way we consider this a perfect window and strongly recommend it to all who contemplate building.

The Simplex Window Company have their offices at 525 Market Street, San Francisco, and they will cheerfully answer all inquiries and mail their descriptive booklet to all who make inquiries and desire same. This booklet explains their different windows, single and double, verticals, single and double casements and their casement combination for large, heavy windows, and all operated by similar mechanism slightly modified to suit requirements.

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A new building stone has been found in Oregon which resembles a mixture of clay and sand and hardens after exposure to the air.

Varnish Works Visited

About twenty of the leading architects and master painters from Oakland were the guests at the factories of W. P. Fuller & Company, Friday, November 28, 1913.

The party left San Francisco for the works at South San Francisco on the company's steamer "Sunol," and upon arriving there made a thorough inspection of the several factories, which cover about twenty acres.

The new varnish works received special attention, not only because it is the largest on the Coast, but because of its complete and modern equipment.

A fire drill and turkey luncheon were included in the program of the day. A special trolley car from the factory to the station, and a sightseeing auto from Third and Townsend streets to the Ferry, were details which added greatly to the comfort of the guests.

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Trade Notes

H. B. Potter, of the Los Angeles Pressed Brick Co., was a recent San Francisco visitor.

Architect Otto Neher, of Neher & Skilling, has returned from a five weeks' trip on the Coast.

Architects Wm. H. Austin and H. H. Lowbridge, Associated, Long Beach, have moved their offices from 18 Locust avenue to 20 Elm avenue.

W. D. Miles, superintendent of the Pacific Fire Brick Co., Portland, Ore., was a recent San Francisco visitor on his way to Los Angeles, Cal.

Architect Frederick Norman, Los Angeles, has moved his office from the Wright & Collander building, to 608-610 Brockman building, Seventh and Grand avenue.

Architect Myron Hunt, Los Angeles, has returned from an extended trip to New York City.

Architect Fred R. Dorn, Los Angeles, has moved his office from the Douglas building to 1230 Marsh-Strong building.

Architect Chas. Speierman, San Diego, Cal., has moved his office from 200 Timpken building to room 612, same building.

Lindsay & Shaw, architectural designers, have opened offices in rooms 523-546 First National Bank building, Long Beach.

Architect U. Grant Fay, Seattle, Wash., has moved his office from 335 Central building to 621, same building.

Bill & Jacobson, formerly located at 524-526 Pine street, have moved their office to suite 334, Rialto building.

A. A. Rucker, of the Sturm Dumbwaiter & Elevator Co., Portland, Ore., was a recent visitor in San Francisco on business.

Architect H. A. Schulze has returned from New Orleans after attending the convention of the American Institute of Architects.

Arnott Woodroofe, architect, formerly of the firm of Woodroofe & Constable, has opened an independent office at 601 Tacoma building, Tacoma, and will also have drafting rooms at Grant's Crossing, American Lake, Wash.

Architect F. A. Noyes, Jr., Los Angeles, has moved his office from 216 to 1009 California building. A. H. Stibolt is now associated with Mr. Noyes.

Architect William Mooser has returned from New Orleans after attending the annual convention of the American Institute of Architects.

Architect H. G. Whitehouse, formerly of the firm Keith & Whitehouse, Spokane, Wash., has opened offices in the Hutton building, and would like samples and catalogues from manufacturers.

Peabody & Smart, 9-11 Central building, Phoenix, Ariz., architects and engineers, is the new architectural firm name under which the new business of Cook & Smart, to which they are the successors, will henceforth be conducted.

Architect C. E. Wolfe, Pomona, Cal., has returned after an absence of several months on business and pleasure and has reopened his offices in suite 3-4, State Bank building.

The exterior of the Durant School, Oakland, Cal., will be finished with matt glaze and polychrome terra cotta furnished by N. Clark and Sons, San Francisco.

A. W. Eckberg, from the sales department of the Dahlstrom Metallic Door Company, Jamestown, N. Y., was a recent visitor to San Francisco. Mr. Eckberg is calling on their Pacific Coast representatives.

Chas. Gordon, formerly of New York, has opened an architectural office at 425 Los Angeles Investment building, Los Angeles, and will be pleased to receive catalogues, samples and prices from material firms and dealers.

J. A. Fennell, of the architectural firm of Wayland & Fennell, Boise, Idaho, has returned after spending some time in San Francisco in letting contracts on the Idaho State Building, for which his firm were the architects.

The Dahlstrom Metallic Door Co., Jamestown, N. Y., have issued a new book on "Metal Mouldings and Shapes." Architects will find this book a ready reference and of value in their work. A copy may be had for the asking.

John D. Ripley, with the Portland office of F. T. Crowe & Co., was a recent visitor in San Francisco on his way to Los Angeles. Mr. Ripley is combining business with pleasure on the trip.

N. Clark & Sons, San Francisco, will furnish the architectural matt glaze terra cotta for the fourteen story Carlston-Snyder building at the junction of Broadway and Telegraph avenue, Oakland, B. G. McDougal, architect.

After an absence of seventeen years from Los Angeles, Architect J. F. Walker has returned and will open an office here. Mr. Walker has been State Architect of Idaho and has done much work in Utah and Texas as well as St. Louis since leaving Los Angeles.

The Los Angeles Pressed Brick Co., Los Angeles, Cal., furnished the enamel brick and hollow partition tile on the First National Bank building, shown in this issue. Morgan, Walls and Morgan, architects.

O. K. Edwards, manager of the Pacific Face Brick Co., Portland, Ore., was a recent San Francisco visitor. Mr. Edwards is combining business with pleasure and will visit Los Angeles before returning to Portland.

Architect A. F. Heide, formerly well known in San Francisco practice, has returned from Seattle and opened offices at 203 Maskey building. Mr. Heide has been commissioned to prepare the plans for the Washington State building to be erected at the Panama-Pacific exposition.

The elevator equipment in the I. N. Van Nuys building, Los Angeles, consists of six Otis 1:1 gearless traction electric passenger elevators, capacity 2500 pounds, at a car speed of 75 feet per minute; two hydro-with Armstrong full flash light signal system and Ricketts threshold lights; one Otis electric freight elevator, magnet control, capacity 3500 pounds, car speed 200 feet per minute; one Otis push button control electric elevator for the bank use, with capacity of 1500 pounds, at a car speed of 75 feet per minute; two hydro-pneumatic direct lift plunger sidewalk elevators.

The Van Emon Elevator Co., 511 Broadway building, Portland, has completed the installation of two tandem-gear electric passenger elevators in the new police headquarters building, Portland. These have a speed of 300 feet per minute. This company has also installed an automatic passenger elevator in the Almira apartment house at Thirteenth and Salmon streets, Portland, for I. M. Buell.

Architect Earl Joses Brenk, 701 Timpken building, San Diego, and Miss Emily Atwood of Monrovia, were married at the home of the bride's parents, Mr. and Mrs. Chas. B. Atwood, 228 Encinitas avenue, Monrovia, last week. After their bridal trip they will be at home in San Diego, where Mr. Brenk established an office a year or more ago.

Mr. Eveleigh, of the architectural firm of Dalton & Eveleigh, Vancouver, B. C., is preparing to leave soon for an extensive trip in the eastern states and Europe, in connection with commissions which he has accepted, and is closing up all firm business in which he is interested before his departure.

Charles A. Smith, senior member of the architectural firm of Smith, Rea & Lovett, of Kansas City, is a visitor in Los Angeles and will remain until about December 1st. His firm is the architect for the board of education of Kansas City and is engaged in executing about $4,000,000 worth of school work aside from the private practice.

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The Pacific Face Brick Company of Portland, Ore., report a great deal of activity in the face brick business for the past few months. Some of the buildings where they have furnished their material are the Northwestern Bank Building, a fifteen-story structure, the Pacific Telephone Company's new twelve-story building, the Morgan Building, eight stories; the two Ford Motor Company's buildings of Portland and

Seattle, the Huffman, Kenton and Ainsworth schools, besides many others in the cities and towns of the Northwest.

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The Giant Model "A" Stationary Vacuum Cleaner, either one to a ten sweeper plant, has embodied a long felt principle. A great volume of air produced on small H. P., placing one in position to have either low, medium or high vacuum, and, at the will of the operator, it can instantly be converted into a powerful compressed air. This places the operator in position to do a certain class of cleaning, which has heretofore been greatly neglected. It is also considered of great value in cleaning rail motors, elevator machinery and all kinds of decorative material. If a system is properly installed with proper sized piping, avoiding pockets which have been so carelessly put in a great many installations, one will be assured of a perfect working system. The following is one of the best guides for any architect, builder or engineer to follow:

No two vacuum systems on the market are the same standard of capacity in making quotations, some makers building air equipment two to three times larger than others. Even though they are rated the same sweeper capacity, therefore the engineer should determine what in his opinion constitutes the proper standard of capacity and then select a plant or call for proposals on a plant of a specified air displacement and vacuum. This will compel all makers to bid on the same equipment and will assure the purchaser of getting exactly what he contemplates.

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CALIFORNIA.

Church Building—Oakland, Cal. William Knowles, Architect, has been commissioned to prepare plans for the new church edifice for the New Plymouth Congregational Church of Oakland, to be erected at the corner of Piedmont and Laurel Avenues, to cost about $60,000.

Hotel Building—San Francisco. Architect, Chas. J. Rousseau, 46 Kearny St., has prepared plans for a three story frame hotel building to be erected on the corner of Scott and Leonard Sts., and to cost about $25,000.

Store and Apartment Building—San Francisco. Architect, Theo. Lemme, Humboldt Bank Building, has been commissioned to prepare plans for a two story frame building to contain store and apartments, on the first floor, and modern flat on the other floor. Building will be located on North Ave. near 17 St.

Hotel Building—San Francisco. Architect, Joseph Cahen, 45 Stevens St., has completed plans for a four story and basement brick hotel building to be erected on Hyde St. near Sutter, for Henry Rosenberg. The building will cost about $25,000. The same architect is preparing plans for a two story and basement frame residence to be erected for Mrs. Harris on Clifford St., in the Ashbury Heights District.

Residence—San Francisco. Architects, Houghton, Sawyer, Shreve building, has completed plans for a residence for E. Sheldon Potter, to be erected on the northwest corner of Jackson and Cherry Sts. The construction will be of brick and stone and will cost about $60,000.

Church Building—San Francisco. Architect, W. J. Wells. Central Home Building, Oakland, has been commissioned to prepare plans for a new church building for the Artesia Methodist Episcopal Church, to be erected on the corner of Geary and Webster Sts., and to cost about $10,000.

Bungalow—San Francisco. Architect, Edward R. Young, 251 Kearny St., has prepared plans for a number of one story frame bungalows which will be erected by Thos. Searle on the west side of 44th Ave., south of California St. Each house will cost about $2,000.

High School—Eureka, Cal. Architect, Wm. H. Weeks, 75 Post St., San Francisco, has completed working drawings for a new high school building to be erected at Eureka. The building will be of reinforced concrete.

Emporium Building—San Francisco. Architect, D. W. Pickett, Central Bank Building, Oakland, has been commissioned by the Hawaiian Government to prepare plans for the building to be erected in Honolulu at the Panama Pacific Exposition. The building will cost about $50,000.

Residence—San Mateo. Architect, Chas. P. Weeks, Wells Fargo Savings Bank Building, has prepared plans for a two story and basement reinforced concrete house which will be erected for William C. Talbot, on the property in San Mateo at the east end of Poplar Ave., to cost about $15,000.

Apartment Building—San Francisco. Architects, O'Brien & Werner, Fiscarty Building, have completed plans for a three story and basement English building, designed for a modern apartment house, which will be erected for George Bernard, on the corner of Gough and Page Sts., and to cost about $25,000.

Exposition Building—San Francisco. Architect, Henry Hornbostel, New York City, has been commissioned by the State of Pennsylvania to prepare plans for the building which is to be erected for their share for the Panama Pacific International Exposition.

Office Building—San Francisco. Architects, Wells Peck & Kirkpatrick, Exchange Building, state that practically all the letters for the Downing Holders office structure have been received and that contracts will be signed very shortly. The steel structure should be let for

Garage—San Francisco. Architect, C. B. Thayer, Mechanics-National Bank building, has prepared plans for the one storage to be erected on Van Ness Ave. near Jackson St. for Mr. O. Dolding, at cost about $50,000.

Garage—San Francisco. Architect, Miles Dauphinais, 114 Ellis St., has prepared plans for a large commercial garage to be erected for Matilda Cerf on the north side of Post St. near Jones. The building will be of reinforced concrete construction and will cost about $80,000.

Office Building—San Francisco. Architects, J. Martin Hamlin, Central Building, Los Angeles, has working drawings nearly completed for the 14-story class "A" office building to be erected on the southeast corner of Montgomery and Post Sts., for the Dodge estate, or the Occidental Hotel, and will cost between $600,000 and $1,000,000.

Warehouse—San Francisco. Architect, Chas. J. Rousseau, 46 Kearny St., has prepared plans for a large brick warehouse to be erected on Fifth St., near Howard. The building will be two stories in height, and the exterior will be faced with brick interlaced with tapestry brick, and will cost about $15,000.

Store and Apartments—San Francisco. Architects, O'Brien & Werner, Fiscarty Building, are preparing plans for three story and basement Class "C" building, to be erected on Mission St. near Seventh, for the Talley Investment Co., to cost about $35,000.

Library Building—San Francisco. Architects, Reid & Reid, Balboa Building, have completed working drawings for the Raymond branch of the San Francisco Library. The building will be erected on Small Ave. north of Geary St. It will be a concrete building costing about $45,000.

School Building—Cerro Gordo, Cal. Architect, Wm. H. Weeks, 75 Post St., has been commissioned to prepare plans for a one-story and basement reinforced concrete school building to cost $20,000. Same architect is preparing plans for a two story and basement reinforced concrete building to be erected at Oxford, to cost $40,000.

Power Station—San Francisco. Architect, Fred H. Meyer, Bankers Investment Building, has completed plans for a three story concrete power station to be erected on the Bothin Lot, Bothin Co. on Commercial St. west of Montgomery.

Store and Hotel Building—Oakland, Cal. Architects, Bakewell and Brown, 251 Kearny St., have prepared plans for a two-story and basement brick and steel store building, to be erected on the southwest corner of Telegraph Avenue and 42nd.

Hospital Addition—San Francisco. Architects, Weeks & Day, Mills Construction Building, have completed working drawings for a four-story class "A" addition to the Notre Dame Sisters' San Cristina Hospital, California St. The building will have a steel frame and concrete walls of selected brick and will cost approximately $20,000.

High School—Santa Paula. Architects, Allison & Allison, Hibernia Building, Los Angeles, have completed plans for a two and eight-room building to be erected at Santa Paula. There will be about 30 desk stations and lecture rooms. The building will be a brick structure and will cost about $30,000.

School Buildings—Coos Bay, Oregon. Architect, A. C. Warren, Hibernia Building, Los Angeles, is preparing plans for a one-room and basement brick assembly school building to be erected at Coos Bay, Oregon. The building will contain one room and will cost about $25,000.

Store Building—Coos Bay, Oregon. Architect, A. C. Warren, Hibernia Building, Los Angeles, is preparing plans for a one-story and basement brick store building to be erected at Coos Bay, Oregon. The building will cost about $25,000.

Residence—Los Angeles. Architect, Hunt & Burns, Laughlin Building, have been commissioned to prepare plans for a two-story 10-room residence to be built on Park Knoll for Mr. Hunt. The building will cost about $25,000.

Lodge Building—Coronado, Cal. Architect, Jos. A. Rosen. Coronado, has prepared plans for a three-story brick lodge build-

ing to be erected at the corner of Main and Cleveland Sts., for the Porterville Lodge of the I. O. O. F.

Hospital—Los Angeles. Architects, Garrett & Farrell, Courier Building, have prepared plans for the five-story and basement reinforced concrete hospital building to be built on South Hope St. near Jefferson, for the Methodist Hospital Association.

Masonic Temple—Fillmore, Cal. Architects, Train & Williams, Exchange Building, have been commissioned to prepare plans for the Masonic Lodge of Ventura. The building will be two stories, 50x90 feet.

Masonic Temple—Holtville, Cal. Architects, Mayberry & Parker, Pacific Electric Building, Los Angeles, have been commissioned to prepare plans for a two-story and basement brick lodge building for the Masonic Temple Association at Holtville, at a cost of about $20,000.

Railroad Station—Los Angeles. The State Railroad Commission have approved the plans for the new arcade station to be erected at Los Angeles by the Southern Pacific Railway Co. at the cost of $250,000. The plans were prepared by Architects Perkinson & Bergstrom.

Stores and Apartments—Los Angeles. Architect, L. L. Jones, 236 I. W. Hellman Building, has prepared plans for the three-story brick store and apartment house to be erected on W. Peco St. near Harvard, for J. P. Partch.

Church Building—Long Beach, Cal. Architect, H. M. Patterson, 324 O. F. Johnson Building, Los Angeles, has completed plans for the Congregational Church for a new edifice at Long Beach. The building will be of brick and will cost about $100,000.

Hotel Building—Los Angeles. Architects, Barnett, Haines & Barnett, 717 Wright & Collender Building, have completed plans for the 11-story and basement Class "A" store and hotel building to be erected on Main St. between Eighth and Ninth for Frederick Glass of San Francisco. The building will be of steel frame and pressed brick exterior and terra cotta trim. It will cost about $100,000.

Fire Station—Berkeley, Cal. City Architect W. H. Ratcliffe, Jr., has prepared plans for the first fire house to be built under his direction. The building will be reinforced concrete with tile roof. The same architect is preparing plans for five additional fire houses.

Lodge Building—Los Angeles. Architects, Morgan, Walls & Morgan, Van Nuys Building, are preparing plans for a Class "A" store and lodge building to be erected on the northwest corner of 12th and Flower Sts., for the Odd Fellows Temple Association. The building will cost about $300,000.

Office Building—Los Angeles. Architect, Thornton Fitzhugh, Pacific Electric Building, has prepared plans for a three-story Class "A" office building to be built on Sixth St. near the hall of the Building Owners Co. It will cost $35,000.

Church Building—Los Angeles. Architect, Jos. Deremer, Title Insurance Building, Los Angeles, has been commissioned to prepare plans for a group of three buildings to be erected at the corner of Third and Western Ave. for the Wilshire Presbyterian Congregational Church, to cost $125,000.

School Building—Palms, Cal. Architects, O. P. Dennis and H. H. Huitt, Fay Building, Los Angeles, are completing working plans for a new brick school building to be erected at Palms, and will cost $45,000.

School Building—Sanger, Cal. Architect, J. Carl Thayer, Fresno, Cal., is preparing plans for a one-story brick school building to be erected at Sanger. It will contain eight class rooms and library. To be built of brick with tile roof and to cost $25,000.

Church—Redondo, Cal. Architect, Albert C. Martin, Higgins Building, has prepared plans for the Catholic Church of Redondo for a brick church building.

Hotel Building—Oakland, Cal. Architect, C. W. Dickey, Central Building, has prepared plans, and will thoroughly remodel the Abrahamson Building on the corner of 13th and Clay Sts. Interior will be completely rearranged and exterior alterations will also be made at the cost of about $50,000.

Residence—Oakland. Architect, Harvey Partridge Smith, has prepared plans for a two-story frame and stucco finish residence and garage for Wallace Clark to cost $4,000. The same architect is preparing plans for a residence for Mayrus Mitling, Galt, Cal., for a two-story frame residence to cost about $6,000.

OREGON.

Apartment House—Portland. Architect, W. H. Downing, Abington Building, has prepared plans for a seven-story and basement reinforced concrete apartment house to cost $250,000.

Store and Apartment House—Marshfield, Ore. Architect, Newton C. Garnt, Chamber of Commerce Building, Portland, has been commissioned to prepare plans and specifications for a two-story structure to be erected for C. A. Metland at Marshfield.

School Building—Dalles. At the special meeting of the tax payers of the local school district, the construction of a new $100,000 high school at Dalles was unanimously recommended.

Hotel Building—Albany. Architect, W. F. Tobey, has been commissioned to prepare plans for an addition to the St. Francis Hotel at Albany, which will be 50x50 and containing 50 rooms.

Forest Grove. The local Moose will erect a lodge building in this city that will cost $32,000. The structure will be 66x90 feet. The first floor will be a store room and the second will consist of lodge, banquet and club rooms. The third will have dance hall and reception rooms.

City Hall—Klamath Falls. Bonds have been voted and carried for the purpose of building a city hall to cost $50,000. No architect has been selected.

Store Building—Roseburg. Architect, Earl A. Roberts, Selling Building, Portland, is completing plans for a store building to be erected at Roseburg. The structure will be 40x110 feet, of brick construction, and will be divided into 12 storerooms.

Mill—Eugene, Ore. A. C. Dixon, manager of the Booth-Kelly Lumber Co., reports that the machine shops at Wendling, which were burned a few days ago, will be repaired soon.

Theater Building—Portland. Calvin Heilig, owner of the Heilig Theater, is considering the erection of a theater on the corner of Broadway and Salmon Sts., and a theater on the property of the old Library site, covering a half block between Broadway and Park Sts., on Stark. The building will cost about $250,000.

Warehouse—Portland. Architect, P. Chapelle Browne, Hohawk Building, has prepared plans for a reinforced concrete warehouse that will be three stories high, covering a site of 100x100, and erected on the corner of 15th and Hoyt Sts.

Business Block—Monroe, Ore. Architect, Ira A. Warsfeld, Corvallis, has completed plans for a two-story structure to be erected at Monroe for A. Wilhelms & Son. The cost will be about $6,000.

School Building—Eugene, Ore. At the regular meeting of the school board a resolution was passed favoring the erection of a new $100,000 high school building at Eugene within the next year and the conversion of the present building into a junior high school.

Hotel Building—La Grande, Ore. P. A. Foley, owner of the Foley Hotel, has announced his intention of constructing a new hotel building in the near future and proposes spending $125,000 on the new structure, which will be seven stories high.

Steel Plant—Portland. Plans have been completed by the engineer of the Northwest Steel Co. for their large structure to be erected in South Portland. The structure will be two stories high and of a floor area of 57,500 square feet. The plant will cost $40,000.

Lodge Building—Bandon, Ore. The Moose are preparing for the erection of a $25,000 building as the headquarters of the Moose at Bandon.

School Building—Arlington. The citizens of Arlington School District at the meeting recently held voted a $15,000 school building to be erected by the next school year.

School Building—Condon. A modern school building to be constructed of brick and concrete to cost $20,000 will soon be erected at Condon.

WASHINGTON.

Residence—Seattle. Architect, David J. Meyer, Central Building, has completed plans for a $15,000 residence to be erected for Dr. Wurdemann at Lake Forrest Park.

Motor Speedway—Seattle. Architect, Julian Everett, Walker Building, has plans nearly completed for the grandstands, garages, judges' stands, etc., for Seattle Motor Speedway Association, Renton Junction, at an estimated cost of about $75,000.

Residence—Spokane, Wash. Architects, Cutter & Malgren, have completed plans for a large residence for Mr. Payton that will cost $50,000.

Residence—Tacoma, Wash. Architects, Lundberg & Mahon, Provident Building, have completed plans for a two-story residence for Dolph Jones, to cost $5,000.

Show House—Seattle. Architect, Warren H. Milner, Arcade Building, is now taking bids for the construction of the Alaska Theater at 1112 Second Ave. The building will be five stories high and will cost about $150,000.

Warehouse—Seattle. Architects, Saunders & Lawton, Alaska Building, have awarded the contract for the A. Hambach Co. building on First Ave. near King, to the Puget Sound Bridge & Dredging Co. It will cost $125,000.

Church Building—Aberdeen, Wash. Architect, J. A. Creutzer, New York Building, Seattle, has been commissioned to prepare plans for the construction of a $10,000 edifice for the Swedish Mission Church at Aberdeen.

Lodge Building—Port Angeles. Architect, Julian Everett, Walker Building, Seattle, has prepared plans for a three-story steel and reinforced concrete club house for the Port Angeles Elks, to cost $50,000.

Church Building—Seattle, Wash. Architect, J. A. Creutzer, New York Building, Seattle, is preparing plans for a concrete church for the First Methodist Episcopal South, to cost about $45,000.

Warehouse—Spokane. Architect, W. A. Ritchie, Lindell Building, has prepared plans for a two-story brick warehouse to cost $20,000 for T. E. Seemndorf.

Residence—Seattle. Architect, Ellsworth Storey, New York Building, is preparing plans for a two-story and basement nine-room residence for John Jermelli to be erected at 38th and Olive Sts.

Office Building—Tacoma. Architects Heath & Gove, National Realty Building, have been recently called upon to prepare plans for the 16-story reinforced concrete and steel additional to the National Realty Building, at the east to about $450,000. Some architects are preparing plans for a department store building for David Gross on S. 38th and 11th, to cost between $75,000 and $100,000.

Residences—Tacoma. Architect, Luther Turnbull, Savage Seefeld Building, has completed plans for 2 two-story and basement residences for A. G. Gratton, to be erected on G St. near Severon, and to cost about $45,000.

BRITISH COLUMBIA.

Store Building—Victoria. The Hudson Bay Co. has increased the appropriation for their store building from $450,000 to $1,250,000. The plans have been completed for additional structure and the company intends to go ahead with the building at once.

University Building—Point Grey. Architects, Sharp & Thompson, Lemon Building, Vancouver, have plans nearly completed for the $500,000 University to be erected at Point Gray.

Jail—Victoria. Architect, J. C. M. Keith, Victoria, has been commissioned to prepare plans for a new jail which will cost $80,000.

Hotel—Victoria. Architects, Fox & Berrill, have prepared plans for a three story and basement hotel building to be erected on California and Courtney Sts. for Steven Jones, to cost $50,000.

Hotel Building—Vancouver. Architect, H. B. Watson, has prepared preliminary plans for a six-story reinforced concrete hotel building to be erected on Georgia St., to cost $200,000.

Residence—Vancouver. Architects, Somervell & Putnam, Lindon Building, are expected to prepare plans for the proposed palatial residence for B. T. Rodgers of the B. C. Sugar Refinery Co. The probable cost will be $400,000.

MISCELLANEOUS.

Theater Building—Lewistown, Mont. Architect, J. G. Link, Billings, Mont., is preparing plans for the erection of a new theater building.

Hotel Building—Logan, Utah. According to Mr. H. E. Hatch, a $150,000 hotel is to be erected at this place next spring. The structure is to be erected on the old Thatcher Bank corner.

School Building—Logan, Utah. Architects, Cannon & Fetzer, are preparing plans for the new Chemistry building for the Utah Agricultural College at this place, to cost $50,000.

Passenger Station—Pocatello, Idaho. Plans have been prepared for the erection of a new passenger station for the Oregon Short Line R.R. Co. by Carl Snyder, Chief Engineer, Salt Lake City.

Factory Building—Carson City, Nevada. Articles of incorporation have been filed for the California Ne-Ice Refrigerator Manufacturers Co. with a capital of $50,000. The company will purchase a site and erect a factory and sell patent refrigerators.

Lodge Building—Salt Lake City, Utah. The committee of the Knights of Columbus have been authorized to expend the sinking fund for a club house and maintain a club. It has been announced that $30,000 will be expended for a new home.

Hotel Building—Phoenix, Ariz. Architect, F. C. Hearst, 129 N. Central Ave., has been commissioned to prepare plans for a six-story hotel building to be erected on Central Ave. for Mr. Sahrooded to cost $75,000.

Apartment House—Pocatello, Idaho. Architects, McNichols & Daniels, who are now building the five-story business and flats building, are asking for immediate bids for the new $30,000 modern apartment house situated on the east side of the Presbyterian Church.

Theater—Ogden, Utah. Plans have been prepared for the Lyric Theater for a seating capacity of 1,200 and 2,500.

Lodge Building—Alder City, Mont. The local lodge of the Elks will soon erect a $65,000 lodge building in this city.

Memorial—Denver, Colo. Architects, J. B. Benedict, Denver, has assembled plans for the erection of the Henry D. Dennison Memorial Laboratory for the University of Colorado at Boulder to cost $100,000.

School Building—Salt Lake City. According to President Greenhalgh plans and specifications for the new Central Building for the University of Utah will be considered at the next meeting of the Board of Regents and authority directed to prepare plans for building to will cost $55,000.

Idaho Falls, Idaho. Architect, J. W. Dull has prepared plans for the new Carnegie Library to be erected at this place. The structure will be of brick 40x50 feet and cost approximately $15,000.

Lyric Theater—Alameda, Cal. Architect, W. J. Dellenbaugh, Bank Bldg., has been commissioned to prepare plans for a two-story reinforced concrete and steel structure that will cost about $60,000.

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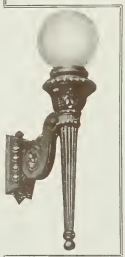

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THE PACIFIC COAST ARCHITECT

A·MONTHLY·JOURNAL·FOR·THE ARCHITECTURAL · INTERESTS

SAN FRANCISCO
CALIFORNIA

VOLUME SIX
NUMBER FOUR

JANUARY, 1914

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You will also find our catalogue in "Sweet's," pages 546-549, in the 1913 Edition.

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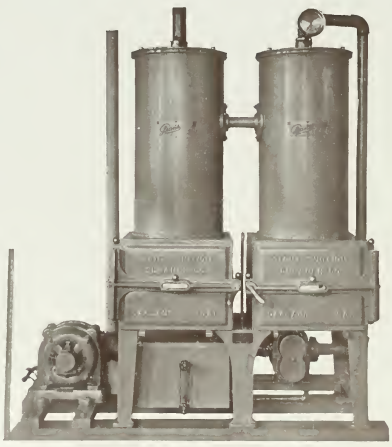

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VOLUME VI — SAN FRANCISCO, CALIFORNIA, JANUARY, 1914 — NUMBER 4

THE PACIFIC COAST ARCHITECT

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The Editor will be pleased to consider contributions of interest to the readers of this publication. When payment for same is desired this fact should be stated. Self addressed envelopes must accompany all such contributions.

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Current Comments

The Pacific Coast Architect is the official organ of the San Francisco Chapter American Institute of Architects.

✧ ✧ ✧

The plastering controversy, which is fully covered in a special article in another part of this issue, has bid fair to tie up all buildings now under construction. The manner in which the General Contractors' Association is handling this difficulty is greatly to their credit. Many of the architects and contractors not members of the Association, are being supplied with plasterers through the medium of the general contractors' labor bureau. A card system is in effect, which will shortly eliminate the poor mechanic, and it is expected that the membership of the new union will shortly be as proficient as the members of the former union, No. 66. Plasterers are coming here in numbers from all Pacific Coast cities.

✧ ✧ ✧

Brick Treatment of Small Commercial Buildings

The increasing use of colors and designs worked out in face brick or brick with tile inlays is one of the pleasing features of the work of the architects, as shown particularly in the treatment of the fronts of small commercial structures, such as garages. It is suggestive also of the fact that not only are the architects making a more thorough study of the use of colors and of brick work design, but that the public in general is advancing to an appreciation of the value of careful architectural treatment of even buildings of lesser importance or pretense.

The skillful handling of face brick, either in effective designs with the use of one kind of brick only, or of different kinds of brick in harmonious colors, is an art that well merits the attention of the architect. The striking and pleasing effects that may be obtained with brick work alone, or with tile inlays, is shown in a number of lately built structures of various classes and sizes. The brick manufacturers have made this possible through the creation of new kinds of ornamental brick in great variety, so that now the possibilities of ornamentation with brick, supplemented perhaps with trimmings of artificial stone or tiles, is almost unlimited.

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BUILDING TOTALS FOR LAST YEAR BIG

Indications Point to an Excess in 1914 of Between Five and Seven Millions Over 1913.

The last day of the year 1913 brings the grand total for public and private construction in San Francisco to $32,814,761 as against $26,179,116 during the year 1912 and $24,431,268 in 1911. Government work of city and state construction were not included during the years of 1911 and 1912. The month of December, 1913, shows a grand total of $2,534,068 divided as follows:

Private construction	$1,050,636
Panama-Pacific Exposition Work	1,244,684
City and County	108,952
U. S. Government	129,796
Total	$2,534,068

The total of City and County construction for the month does not include private contracts let for street work or a larger amount of street and sewer construction let by the municipal authorities.

Totals for each month during 1913 follows:

January	$2,655,900
February	2,736,813
March	3,576,376
April	3,327,584
May	2,816,935
June	2,836,306
July	3,826,998
August	2,844,945
September	2,450,589
October	2,152,700
November	1,092,048
December	2,534,068

Present indications, judged from work reported in the various architects' offices which is to be completed during 1914, and from reports of city and county work, state construction and the vast amount of construction contemplated by the federal government and the Panama-Pacific Exposition Company, the total for 1914 will exceed that of 1913 by between $5,000,000 and $7,000,000.

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Building Operations for the Month of December

Building activities throughout the city for the month of December, as reported by the Bureau of Building Inspection of the Board of Public Works, shows a renewed activity in the building line.

The total value of the estimate cost of these improvements aggregates the sum of $1,050,636. This is for private construction only and does not include the vast expenditures being made in the Exposition Grounds, some of which will prove to a permanent character, but does

it include the permanent improvements being made by the United States Government in the fortifications and Administration Buildings within the city limits, neither does it include the State's quota in harbor improvements, docking facilities, Armory and State Normal School extensions.

Figures compiled by the Bureau of Building Inspection are as follows:

Class—	No. of Bldgs.	Amount
Class "A"	3	$ 857,250
Class "B"	1	20,000
Class "C"	18	538,350
Frames	132	414,450
Alterations	255	126,287
Total	409	$1,956,339

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Buildings on Exposition Grounds

The following list of buildings let and to be let, gives a comprehensive idea of what has been accomplished in the building of the Exposition, and what still remains to be done. The figures as given here were compiled by Harris D. Connick, Director of Works, Panama-Pacific International Exposition:

Contracts For Which Have Been Let.

Service Building	$ 60,000
Municipal Auditorium	1,275,000
Machinery Building	664,000
Food Products Building	349,000
Education Building	303,000
Liberal Arts Building	346,000
Manufactures Building	336,000
Varied Industries Building	313,000
Mines & Metallurgy Building	385,000
Transportation Building	489,000
Agriculture Building	418,000
Horticulture Building	376,000
Main Tower	441,000
Court of Four Seasons	216,000
Court of the Universe	443,000
Three Fire Stations	40,000
Fine Arts Building	600,000
Total	$7,027,000

—Daily Pacific Builder.

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The Plastering Controversy

By WM. E. HAGUE

During the month the building industry of San Francisco has become involved in a jurisdictional dispute of little merit, and yet one which is delaying the progress of buildings now under construction. We allude to the existing controversy between the Building Trades Council and the local Plasterers' Union, No. 66. The resume of the situation will probably be of interest to our readers.

At the time when bids were being called for on the Machinery Hall, to be erected for the Panama-Pacific International Exposition, the Building Trades Council of this city voluntarily filed with the Exposition officials a certain statement as to the conditions of labor which should govern on work within the Exposition Grounds, and which would be satisfactory to the labor unions of this city. The conditions set forth were broad and liberal and permitted of a condition of work described as "Exposition shop." It was agreed in the statement that the labor organizations would not demand the labor union stamp on lumber; that contractors for foreign buildings would be free to import such labor as they might see fit; that no jurisdictional dispute should arise which might disturb the harmony of the work, and while it was clearly understood at the time that this did not mean an "open shop" condition of work, it was evidently the intention of the statement in question that the labor unions did not propose to put anything in the way of the progress of the Exposition building, or that they should arbitrarily demand any unusual conditions.

At the time when the Machinery Hall was ready for plastering and the framing and nailing up of staff work, the question of which trade should properly be employed to put the staff work in place was considered by the Building Trades Council, and it was decided that this work should properly be done by carpenters. The Exposition Company and the contractors interested were so notified and figured accordingly. Shortly thereafter the Plasterers' Local Union, No. 66, objected to the ruling of the Council, and demanded that its members be employed to frame and nail up staff work. Messrs. McGruer & Company, the plastering contractors on the work, were indifferent as to who should perform the labor in question, but as they were proceeding to frame and nail up staff with carpenters at that time, according to instructions from the Exposition Company, as per the agreement of the Council, to which agreement the Plasterers' Union, No. 66, was a party, the plasterers went on strike, and were at one time declared unfair by the Building Trades Council for failing to obey its decision. The controversy lasted for several weeks, and Messrs. McGruer & Company suffered financial loss thereby, amounting to about $3500, as a direct cause of the strike in question. The controversy was finally settled between the two unions involved and the Building Trades Council by a temporary agreement that the framing and nailing up of staff should be done by the employment of plasterers and carpenters in equal numbers, it being understood that the question should be referred to the American Federation of Labor at its annual convention, to be held in Seattle, in November, 1913.

Messrs. McGruer & Company then proceeded accordingly, and while considerable difficulty was encountered in continuing the work by employing the two crafts jointly, the construction progressed with more or less success.

Some two weeks ago the balance of the contractors engaged on Exposition work finding that their buildings would shortly be ready for framing and nailing up of staff, considered the question of the class of mechanics to be employed on the work. A careful investigation revealed the fact that the framing and nailing up of staff work at all previous Expositions which had taken place in the United States for the last twenty years, carpenters exclusively were employed and it was the consensus of opinion that it would be impracticable and almost impossible to pursue the work by employing half plasterers and half carpenters, and that a considerable financial loss to each and every contractor interested would result from such a method.

It has been openly admitted by members of the local Plasterers' Union, No. 66, that there would not be a sufficiency of plasterers to supply the demand which would thus be created, and it must be perfectly evident to any practical builder that trouble would result from an attempt to work carpenters and plasterers together in framing and nailing up staff as the plasterer refuses to handle any material which has not been brought to the scaffold by the plasterer's laborer, that is the hod carrier. The contractors interested contended that carpenters would do more of this work in a day than the plasterers. The difference in cost will be evident when it

is borne in mind that the wages of carpenters is $5.00 a day and carpenters' helpers $2.50 a day, whereas the wages of plasterers are $7.00 a day and plasterers' hod carriers $5.00 a day. In considering the question, it developed that carpenters' tools only were used on this work, viz., the hammer, saw, hand ax and the mitre. This additional cost would eventually fall on the owner.

In view of all these facts and existing conditions, the contractors involved decided that they would do the framing and nailing up of staff by employing carpenters only. There being plenty of labor left to supply all the plasterers with work in plastering the buildings and "pointing up" the staff. It was proposed to proceed accordingly without delay, but at the request of the Exposition Company officials, the actual commencement of the framing and nailing up of staff was laid over until December 1st, in order to give the American Federation of Labor time to settle the controversy, and with a view to promoting harmony in the situation.

At the time when the American Federation of Labor met they were advised by the contractors interested of their attitude in the controversy and were informed that they proposed to frame and nail up the staff by employing carpenters only. When the question came up at the Federation meeting, Mr. P. H. McCarthy, President of the Local Building Trades Council, and a delegate to the Federation meeting, moved that the Executive Council, who had to come to San Francisco in any event, meet here on the job, see the work and then pass upon the question. This motion was made with a view to assisting the Building Trades Council of San Francisco to maintain its position and thereby promote harmony in the local existing situation. The Federation, however, refused to consider Mr. McCarthy's motion and decided that the work should continue to be done by the contractors by employing 50 per cent of each trade.

This was really no decision of the controversy, but was rather a compromise which did not by any means settle the matter, in view of the decision which the contractors themselves had already reached.

In the meantime the attitude of the general contractors engaged on Exposition work (all of whom are stockholders of this Association), and the stand that they had taken was laid before the stockholders at the special meeting of December 17th, and their action unanimously endorsed.

The contractors proceeded, on Monday, December 1st, to begin the framing and nailing up of staff with carpenters only, and on Monday, December 8th, Local Plasterers' Union No. 66, walked out, not only on Exposition work, but on all work in the city and county of San Francisco. During the week the Building Trades Council had met and again considered the situation, and by a vote of 139 to 26, decided that this work should properly be done by carpenters. The members of local Plasterers' Union, No. 66, were then ordered to go back to work, and on their failure to do so, were expelled from the Council at its meeting of the 18th of December, provided they did not return to work the following Monday morning, December 22. Having failed to go back to work, the Building Trades Council then proceeded to organize a new union of plasterers, known as Journeymen Plasterers' Union, Local No. 1, which would be in harmony with the Council, and whose members should be competent to carry on the plastering work on buildings being erected in San Francisco.

The charter of the new union was declared open for thirty days with an admission fee of $5.00 and already a good number of journeymen plasterers from this city and elsewhere have been glad of the opportunity to join the new union. New members are coming in every day.

The Exposition work and the plastering of the buildings down town is now proceeding, and while some difficulty has been encountered in supplying the demand for plasterers, there can be but little doubt that the question will adjust itself in the course of time, and it is to be hoped that the building industry of this city will be allowed to proceed without further jurisdictional disputes or sympathetic actions by any other means.

The local plastering contractors, having some sympathy with the men whom they have been in the habit of employing, and being somewhat misinformed as to the facts in the case, saw fit to adopt a resolution denouncing the Building Trades Council and the General Contractors' Association, for their actions in the controversy, and announced that they would only employ members of Local Plasterers' Union, No. 66. This action would seem to be somewhat ill-advised, in view of all the facts in the case, and it is to be hoped that they will later agree to employ the members of Local Plasterers' Union, No. 1.

While the general contractors are not directly interested, the progress of the buildings now under construction in this city has been somewhat retarded by this jurisdictional dispute, and when the smoke of battle finally clears away, it will probably be found that nobody in particular has received any great benefit from the controversy. The question involved is largely one of principle on the part of every branch of the building industry concerned.

The Executive Committee of this Association has decided that the building industry of this city cannot be tied up on account of this dispute and the members have been requested to proceed with the plastering work in their contracts by employing members of Local Plasterers' Union, No. 1.

It is worthy of note that the Contracting Lathers' Association, along with numerous other branches of the building industry, have decided that the stand of the Building Trades Council in awarding this work to carpenters, should be supported and the lathing contractors along with the members of the lathers' union are desirous of proceeding with their work without delay.

It has been the custom in the past for the general contractors to award the plastering contractor the lathing work on their buildings and the plastering contractor in turn has sub-let this work to the lathing contractor, and is now seeking in all cases to prevent the lathing contractor from proceeding with his work. This has led to another undesirable situation, and as a result the lathing work on buildings hereafter will probably be segregated by the general contractors of this city. In fact there has never been any good reason for the lathing work being included in the plastering contract, except the force of custom. This is an age of specialization and in view of the fact that the cost of metal lathing on a building frequently runs as high as the cost of plastering, there is every reason why the work should be segregated by the general contractors and given to the specialist in that line direct, without the employment of an intermediate contractor.

One point in this entire controversy, which must appeal to a student of organized labor and its method of doing business, is the action of the American Federation of Labor attempting to dispose of this question. That body was notified previous to its annual meeting that the contractors had figured to frame and nail up staff with carpenters and proposed to proceed with the work accordingly. It was also explained to them that the local Building Trades Council had awarded the work to carpenters. In view of these facts and without in any way considering the pockets of the employer, who must pay for the labor involved, the Federation undertook at king

distance to settle a very vexed question without any proper investigation of the existing local situation. That the employers should suffer and continue to suffer under the misguided actions of such men seems absurd, and the time has come when the building industry of San Francisco must take a definite stand on such matters, if the building up of the city is to be encouraged.

The support which the local architects are giving to the stand taken by this Association is encouraging and leads one to believe that they also have come to a realization of the seriousness of continuing to permit labor organizations to dictate entirely as to the conditions of work on buildings being erected in this city.

This entire controversy was referred to the Building Trades Employers' Association at a special meeting of that body, held on January 2nd, 1914, and the action of the Building Trades Council in organizing a new union of journeymen plasterers, and that of the members of the General Contractors' Association in proposing to proceed with plastering contracts by employing members of the new union, was unanimously endorsed.

The building Trades Employers' Association is composed of fourteen Associations of employers and material men engaged in contracting in the various lines of the building industry in this city, and the fact that after thoroughly investigating the existing conditions, a unanimous vote in support of the action of the Council was taken, is the best proof to the public at large that the method of settling the controversy as already outlined is the most practical solution of the problem.

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The Proceedings of the 47th Annual Convention

Report of the Committee on Government Architecture

November 18, 1913.

To the Board of Directors,
American Institute of Architects:

The close of 1912 left the Government, through the repeal of the Tarsney Act, without any means of procuring architectural service outside of the office of the Supervising Architect of the Treasury and such other Bureaus for the preparation of plans as are maintained by other departments, beyond some isolated instances where authority to make other arrangements had been attached by Congress to authorization for public buildings. There was much difference of opinion in the profession as to what should be done to change this condition; some advocating a Bureau of Fine Arts; others a National Board of Works; while many advised the enactment of a law similar to but more comprehensive than the Tarsney Act, while others felt that the certainty of intolerable conditions which would soon confront the Government, made it desirable for the Institute to take advantage of the wave of discontent that this state of affairs must inevitably bring about. As it turned out, members of Congress attending the extra session, found upon inquiry and investigation, that the Supervising Architect's office was not in a position to take up any new work for several years. This created a general demand in Congress for some sort of action. Various members of the Institute reported that they found, when discussing the question with members of Congress, great dissatisfaction existing under the surface, and it seemed that perhaps this could be brought to a focus behind some form of legislation.

That a general feeling exists in Congress that the whole public building question is in a wretched shape is indicated by a provision in the Public Buildings bill, approved March 4, 1913, which is as follows:

"Commission composed of the Secretary of the Treasury, the Postmaster General, the Attorney General, two members of the Committee on Public Buildings and Grounds of the Senate to be appointed by the President of the Senate, and two members of the Committee on Public Buildings and Grounds of the House of Representatives, to be appointed by the speaker of the House, shall, with the aid of the Supervising Architect of the Treasury, present to Congress a connected scheme, involving annual appropriations for the construction and completion of public buildings heretofore authorized within a reasonable time, and shall frame a standard or standards by which the size and the cost of the public buildings shall, as far as practicable, be determined, and shall report as to the adaptability in size, accommodations, and cost of buildings hitherto authorized to the requirements of the Committee in which they are to be located, and also whether the existing appropriations should be increased or diminished to meet such requirements."

From this it would seem that the United States, which has under way and in contemplation more building than any other Government in the world, is drifting aimlessly in respect to this work, and without definite policy regarding what is to be an important part of the enduring evidences of the taste and cultivation of our time. It is to be hoped that the Commission just referred to, consisting entirely of Government officials and employees, may seek the advice and counsel of the profession for whose work it is charged with the responsibility of preparing a connected scheme.

There are a number of courses which the Institute may follow in order to assist in getting the question of Government architecture placed on a basis commensurate with its importance, it being assumed at the outset that the Institute owes it to itself and to the Government to take the initiative in a matter so directly involving its aims and ideals. These may be briefly outlined as follows:

First. Conditions being so generally unsatisfactory to Congress itself, we may confidentially await results with the certainty that some action will be taken by the Government in the near future, free from any responsibility concerning whatever measure of relief that may be decided upon. It seems so obviously the duty of the Institute to point the way, however, that this suggestion may well be rejected as unworthy of serious consideration.

Second. The idea of a Department of Fine Arts, or a Board of Works, or a Bureau of Arts and Buildings, under which all Government expenditures for art in any form may be handled, has most deservedly held an important place in the minds of those interested in architecture and other arts. Legislation leading to the establishment of such a department, that would have jurisdiction over all other buildings, sculpture, objects of art, and works involving these, has been the dream of many of our most earnest members, and it has many advantages. It would immediately place the question of Government architecture and related arts in a position of great importance, and would perhaps enable many things to be done properly which are now done in a slip-shod and slovenly way. On the other hand there are objections to such a plan, which might delay indefinitely its enactment into law. It would be opposed by all the departments of the Government for the reason that no department desires to relinquish control of its work to another department. Its adoption would probably mean that all Government architecture must necessarily be put on a competitive basis, because no other arrangement seems

possible for work of such volume as that now conducted under the supervision of the Treasury Department, and it would be difficult or impossible to make distinctions. As it now stands, any Government Department, except the Treasury Department, can employ architects by direct selections, and it is a question whether the institute should advocate a measure that would make it impossible for the Government to employ private architects except by competition. The drafting of a bill to create a department such as would be necessary to take care of all this work, would be a task of great difficulty and could only be done properly with the assistance of the best legal and legislative experience, after considerable study and re-earch. Therefore, while this plan has much merit, and while its consummation at some future time is to be looked forward to, the Institute should carefully consider whether it covers the needs of the immediate future.

Third. The Tarsney Act proved to be a workable law, and there appears no reason why a similar law, with some slight but important modifications, would not be entirely practical and satisfactory as far as the Treasury Department work is concerned, for the near future at least. The enactment of such a law giving the additional authority to the Secretary of the Treasury to employ juries in each competition, to pay fees to competitors and juries, requiring him to apply it to all buildings above a certain cost and to conduct the competitions and pay the successful architects in accordance with the best practice, may well be considered as a relief from present conditions, while further thought could in the meantime be given to the designing of a plan and working out the detail of a proposed Department of Fine Arts.

Whether such a bill could pass Congress as at present constituted, is not now certain. A bill was drafted by the Committee during the present year, not for introduction for passage, but at the request of a member of Congress to enable him to make a canvas of the House.

It is hoped that the discussion at the convention of the institute on this subject may develop a sentiment in favor of some definite line of action, and that the coming year may see us presenting a united front, pressing for specific action by Congress.

Respectfully submitted,

(Signed) J. L. MAURAN,
M. B. MEDARY, Jr.,
EGERTON SWARTWOUT,
BRECK TROWBRIDGE,
WALTER COOK, Ex-Officio,
JOHN HALL RANKIN, Chairman.
Committee on Government Architecture.

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November 28, 1913.

Board of Directors,
American Institute of Architects,
Hotel Grunewald, New Orleans, La.

Dear Sirs: Your Committee on Conference with the National Association Master Plumbers and National Association Steam and Hot Water Fitters, met the Joint Committee representing those two organizations in New York, November 24th, 1913. Those present were

National Association Master Plumbers—
W. D. Nolan, Washington, D. C.
F. J. Lee, New York.
National Association Steam and Hot Water Fitters—
J. A. Minirall, New York;
W. H. Oakes, Boston.
American Institute of Architects—
Beverly S. King, New York
D. Everett Waid, New York.

The conference was requested by those two organizations for the purpose of renewing the petition which they brought before your Committee a year ago. They desire the serious consideration on the part of the Institute of the evils of the "general contract" system so far as it affects the mechanical equipment of buildings. They presented the matter in the most temperate and reasonable way, with both written and verbal argument to sustain their contention that the system of excluding plumbing and heating in general contracts causes an enormous waste and works injury to the legitimate interests of all concerned. They say that general contractors, after securing contracts on the lists of all competent heating and plumbing contractors, proceed to favor, on their work to lower grade contractors, and by putting in their own pockets the difference in price between cheap and good work, lower the quality of work to no advantage except their own.

Without attempting to transmit a voluminous presentation of argument already familiar to all thoughtful members of the profession, it may not be out of place to recall the fact that there is a strong tendency on private practice toward the direct letting of mechanical equipment. Laws have already been passed in New York and Pennsylvania requiring exclusion from general contracts and the direct letting of plumbing and heating apparatus for state and municipal work. In many other states legislation is already undertaken along similar lines.

There is strong feeling in employers' associations aroused by the treatment accorded them by general contractors, and made intense by the lowering of standards of work to which the best men are committed, and there is little doubt that they might, if they would adopt union methods, make a concerted effort to boycott general contractors in their bidding. It is evident, however, that the Joint Committee and others of the best men in their associations are totally opposed to the adoption of such tactics, and, that they prefer to appeal in a legitimate way to the architectural profession. The prominent members of our profession have already to a large extent made it a practice to let directly contracts for mechanical equipment—work which is most sure to suffer and most difficult for the architect to protect where there is a tendency to lower the quality of construction.

Your Committee recommends for the consideration of the Convention the following resolution:

"Resolved, that the American Institute of Architects in convention assembled recommends to the members of our profession the adoption of the practice of direct letting of contracts for mechanical equipment, such as heating apparatus, plumbing, and electrical equipment. This recommendation is based on the conviction that direct letting of contracts as compared with sub-letting through general contractors affords the architect more certain selection of competent contractors and more efficient control of execution of work and thereby ensures a higher standard of work, and, at the same time, saves money equitable to the financial interests of both owner and contractor."

Respectfully submitted,

(Signed) D. EVERETT WAID,
Chairman.

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Be a real advertiser and devote a portion of money for advertising space. Look upon advertising as a business proposition, and work for efficiency here as well as in the manufacturing quarters.

Would Reduce Architecture to Patterns

Laments, loud and long, are from time to time heard issuing from the office of the U. S. Treasury Department at Washington because "the supervising architect's office is six years behind in its work." To bring daylight to the supervising architect's office, buried under constantly increasing work, it is said to be the plan of the treasury officials to suggest to the public buildings committee of Congress a plan for adopting standard types of buildings to be erected in cities of similar size throughout the country. This plan is thus outlined in a recent press report:

"Treasury officials have been at work for several months on a preliminary report to the public building committee created by congress to work out and improve some system by which a standard could be formed for public buildings, so that cities of a certain size should get a prescribed size of buildings. By its adoption, it was argued, the necessity of drawing plans for every new building would be eliminated, the expense of the upkeep of the supervising architect's office would be lessened and the actual time consumed between the authorization of a building and its completion would be greatly diminished."

Are we then, in going from one end of the country to the other, to see the same postoffice and federal building everywhere? Perhaps if it were a really good type of architecture it would be more pleasing to see it duplicated occasionally, rather than to find abortions in the design of our public structures, through an attempt to originate something different.

But how much better would it be to follow the plan of the American Institute of Architects, expressed by resolution at the last convention, to relieve the congestion in the treasury department by the employment, through selection or by competition, of architects in private practice for the work in that department. As admirably expressed by the convention, what our public structures most need is "that some orderly system should be adopted by the United States government in the designing of its buildings, monuments, etc., in the purchase, selection and acceptance of sculpture, painting and other works of art, whereby the services of those architects, sculptors and painters best qualified for such work may be made available."

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Origin of Present Movement

This would not have been referred to here except for three good and sufficient reasons, viz.: First, progressive conditions today demand it: second, those interested are entitled to know, and, third, it will, it is believed, promote confidence at this time. As author of this program, then, during my European training as an architect, I acquired a working knowledge of Quantity Surveying, and of the operation of the Quantity System of estimating. Arriving in San Francisco in February, 1891 (nearly twenty-three years ago), it was a great surprise to observe the loose methods which prevailed in making up bids, and I was thereupon prompted to ask permission to give an informal talk at the Builders' Exchange upon the advantages which, as I thought, Quantity Estimating possessed over methods then existing. At that period very few persons could be found who even knew the meaning of the word "Quantities." It is true one or two Quantity Surveyors had preceded me, but they had disappeared as mysteriously as they had come. Then again later, in 1891, I gave an address in the Academy of Sciences Building, before the San Francisco Chapter of the American Institute of Architects, upon the subject of "The Quantity System of Estimating." A fair amount of interest was shown, though doubts were expressed as to owners being willing to pay for Quantities being prepared for the bidders' use. But I was not discouraged. Some interest had been aroused among both contractors and architects, and I lost no opportunity of sustaining the interest by personal demonstrations of the many advantages attending the Quantity System of Estimating. This continued for several years. Another address on the "Quantity Estimating" problem was given before the Technical Society of the Pacific Coast, and several articles were contributed to architectural and building journals. Mention may be made among others of an article entitled "Estimating Upon Bills of Quantities," in the "American Architect" of January 23, 1897, page 27; and on May 28, 1898, the same journal was good enough to publish another contribution from me entitled "Quantity Surveying." No opportunity of advocating the necessity for better estimating methods was overlooked. Many were the favorable comments received from contractors, as well as architects, in the Eastern States and Middle West. Many letters and some literature was sent broadcast, and the subject was fast being regarded with increasing favor by architects, and certainly by the better type of contractors. By April, 1906, I had laid out a Quantity System of Estimating (after conferring with many contractors) adapted to American requirements, and my plans were laid and ready for organizing an American Society of Quantity Surveying, the aim of which was better estimating methods and higher ideals for all interested in inviting, submitting and receiving figures. Then came the destruction of San Francisco, in April, 1906, and the loss of most things burnable. Increased responsibilities during the rebuilding of the city alone interrupted my work in aid of the Quantity System. My efforts, however, had not only attracted attention in this country, but from afar off, for the Quantity Surveyors' Association of London, England, in 1909, quite unexpectedly elected me as the first honorary member of their association. Much more might be said, but the foregoing is considered sufficient to place the facts squarely and concisely before the reader. In conclusion, I have always aimed at keeping in close touch with the Quantity System as practised in Europe and have many examples of such work.

It is intended that the policy of this organization shall be broad enough to cordially welcome any one interested in its activities and conservative policy, which are believed to be fundamentally accurate, eminently practical, thoroughly adapted to American requirements, and in full accord with the spirit of the times.

The thanks of all concerned are due to the professional and trade journals, and to architects, engineers and contractors' associations from East to West and from North to South for their kindly interest and cooperation in the years gone by, as well as at the present time. Their pioneer efforts have been much appreciated and are not easily overlooked.

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The Skyscraper of the Future

Skyscraper building is changing and progressing so rapidly that the tall buildings of today are evidently in a transition stage. While skyscrapers not yet thirty years old are being torn down because they are out of date and innovations are appearing in each new building, prophecies of the future city office structure, characteristic of American life, are coming from engineers and architects. That it will be a community building is the

common belief—and that it will be large. It will cover half or all of a city block, perhaps 50,000 to 100,000 square feet of area. Its ground floor will be a network of corridors and arcades to accommodate shops, and it will have subway and aerial, as well as street, entrances.

But the change that is most confidently expected is greater lightness and economy of construction. This is to be accomplished first by a change in the steel skeleton. The use of harder steel—nickel, chrome nickel or vanadium steel—will reduce the weight of the skeleton and probably its cost. Added to this is the abandonment of masonry. The modern skyscraper, it is claimed, needs only a screen to protect it from weather, water, and fire; heavy masonry is useless. A sheathing of from four to eight inches of vitrified clay or concrete will supplant the stone walls and the resulting lightness of the steel framework will reduce the weight of the building by 50 per cent. Foundations will thus be relieved and become cheaper. But a new style of architecture must be evolved, employing smooth, as well as thin, outer walls, for joints in the vitrified sheathing are as unnecessary to the skyscraper as masonry.

The money that will be saved in the economy of materials will be devoted to interior improvements. The future skyscraper will have a climate of its own; its heating, lighting, and ventilating machinery will keep it at a constant temperature. And since the building itself has become fireproof, wooden finishings and furniture will soon disappear.

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Elevator Service in the New Skyscrapers

Graded elevator service is the solution for the transportation problem in skyscrapers that is being developed in New York City. In a building of 35 to 40 stories, with a workday population of 8,000 to 10,000 persons, all arriving within fifteen minutes of the same time in the morning and departing together in the evening, the elevators must be arranged so as to take each person to his floor, whether it is the sixth or the twenty-sixth, in the same length of time and with a wait of not more than thirty seconds for a car. To do this, the elevators are divided into groups, each group serving a certain number of floors and running at different speeds. In a 36-story building now under construction there are to be forty-eight elevators, divided into six groups of eight elevators each, to handle the 8,300 occupants. One group serves ten floors, from the second to the eleventh; another serves the twelfth to the eighteenth; another the nineteenth to the twenty-fourth; another the twenty-fifth to the thirtieth; another the thirty-first to the thirty-sixth. The last group is auxiliary, carrying passengers to all floors and the roof. The number of floors served and the size of the cars decrease toward the top of the building where greater speed is required. All cars run on schedule and every car in the building makes a round trip from the ground to its own floors in the same number of seconds. To increase the amount of office space, each elevator shaft has doors only on the floors that it is intended to serve. Intercommunicating doors in the sides of the cars release passengers if a car is stuck in the shaft. Besides the passenger service, elevators have to be installed to handle fifty tons of coal and twelve to fifteen tons of ashes each day.

Largest Varnish Manufacturing Plant in the World

Among the lesser known commodities, but which, at the same time, play a conspicuous part in our every day life, varnish is a noted example.

While the beautifying effects of varnish are seen on every hand, and the lack of it would detract greatly from the aesthetic harmony of our surroundings, we are apt to accept varnished things as a matter of course, giving but small thought of varnish as a cause or as a commodity.

Among the greatest producers of varnish in the country is the house of Berry Brothers, located at Detroit, Michigan, and which is said to be the largest manufacturing industry in the world.

This firm arose from the most humble origin, the business being established in 1858 by Joseph H. and Thomas Berry, on an extremely modest scale. The infant industry speedily grew into lusty manhood, however, and has kept on growing until the present mammoth factory is one of the show places of Detroit.

The fame of Berry Brothers has been very largely enhanced by their introduction of two great specialties that have attained world-wide popularity, viz., "Lumberry Wood Finish" or Hard Oil Finish, as it was originally called, this name being afterwards changed because the name was imitated so widely, and "Liquid Granite," a finish of remarkable toughness and elasticity, for floors and interior woodwork where the exposure is excessive.

The establishment of Berry Brothers consists of factories and offices at Detroit, San Francisco, and Walkerville, Ont., the latter to take care of their large Canadian trade, and branch houses at New York, Boston, Philadelphia, Baltimore, Chicago, Cincinnati, St. Louis and San Francisco. It also includes warehouses at Kansas City, Denver, Chattanooga, Dallas, Toronto, Winnipeg, and Vancouver, and foreign branches at London, Paris, Berlin, Milan, Brussels, Stockholm, Christiania, Melbourne, Capetown and Buenos Ayres.

The combined storage capacity of the Detroit and Walkerville works is one and a half million gallons of varnish, and the market for the product is the whole world.

Unscathed by panic or financial disaster, the house of Berry Brothers has weathered every storm and is recognized as one of the soundest and most reliable commercial houses in the country.

The death of Mr. Joseph H. Berry, one of the founders of the house, some years ago, while a sad blow to his many friends and employes, had no effect whatever on the standing or conduct of the business, except such official changes as became necessary upon the demise of Mr. Berry, who was chairman of the company.

All the old traditions of which the house of Berry Brothers was built are preserved and maintained by the company. The business policies are also earnestly supplemented by the various heads of departments, most of whom have been connected with the house for long periods of years, and whose interest in the successful conduct of the business is based upon personal regard for the house as much as for interested motives, and with such an "esprit de corps" no firm can do otherwise than prosper.

The general managership of this concern is in the hands of J. S. Stevenson, who has been connected with the house for upwards of a quarter of a century, and knows varnish in all its places in a child known as elsewhere. Mr. Stevenson is rather a chemist of conservation, events, and has besides the executive ability necessary to maintain the general equilibrium of the institution.

THE BUTTERFLY MAP

Device of San Francisco Architect Has Won International Recognition

In March, 1910, the "Chronicle" published a full description of a new land map of the world on an original projection invented by B. J. S. Cahill, and ventured the prophecy that San Francisco was destined to acquire added fame by reason of the fact that one of her citizens had made so important a contribution to cartography. The prediction has been fulfilled. Distinguished geographers in all parts of the world have expressed the conviction that the "Butterfly Map," as the Cahill device is popularly known, is certain to displace the familiar design of Mercator.

It may take a number of years before all the maps now in use are discarded as erroneous representations of the earth's surface. They are woeful distortions, but the cost of replacing them is an important factor, as is also the prejudice in favor of their simplicity. Mercator's diagrammatic representation makes Greenland far too large and Africa far too small, and it is wholly impossible for calculating the shortest distances between points, yet mankind having been so long accustomed to this faulty picture will not readily adapt itself to the novelty of the Cahill outlines.

Fortunately the leading educationalists are already persuaded that it is better to have truth, even if a little more complex, than simple error. At a first glance the new map is for all the world like a butterfly, but after gazing at it for some time one realizes that it is the only way of correctly picturing the earth as a flat surface. Cut an orange into four equal parts, remove the sections of skin, press them out flat, place them together so that the four points are equidistant from each other and lie on the rim of a half circle, and you have the outlines of the field on which is drawn the Cahill map. If your orange were a rubber globe correctly mapped and were cut in the same way you would have the completed design.

A number of fanciful poetic images have been drawn from the butterfly appearance of the new projection, but the most curious circumstance is that it gives the land three distinct points—Cape Town, Cape Horn and Tasmania, thus calling to mind Shakespeare's reference in "King John" to "the three corners of the world."

Though of absorbing interest to students, the average reader may ask of what practical value is the change. To this there are many answers, the most important of which is, probably, that supplied by Professor McAdie, who, in arguing for a rational projection for maps, points out that the Mercator distortion is absolutely valueless for charting storm areas.

As mankind from China to Peru is interested in the weather, it will soon be interested in the Cahill map when it is shown that no other is so well suited for meteorological purposes.—Editorial, S. F. Chronicle, Nov. 23, 1913.

Administration Building, for the University of Utah, Salt Lake City, Utah

The building is now nearing completion. It contains, as its name implies, all the administrative offices of the University, the art department and museum, the library and Government stack room, the Natural History Museum and department, the music department, boys' and girls' rest rooms, locker rooms and toilet rooms. Provision has been made for adding, as soon as the means are available, an auditorium wing in the rear, to seat 1500.

The building is practically fire-proof. It has a steel skeleton with outer walls of brick, stone faced, floors and roof slab of reinforced concrete; partition walls of hollow blocks.

The exterior walls are faced with Sanpete Sand Stone from Southern Utah, with trimmings of cream colored Terra Cotta. The foundation is of local granite.

The building is equipped with a well designed system of heating and ventilation, including an air cleaning device.

This building marks a new era in the school buildings of the State. TO COST, WITH ITS EQUIPMENT, $300,000.00.

Cannon & Fetzer and Ramm Hansen, Associated Architects, of Salt Lake City, Utah.

Macky Auditorium Building, Boulder, Colorado

Time has been when private wealth was hoarded, hoarded for personal gratifications, or left after death in such a condition as to be of no value either to individuals or to the public.

Of late years, many men have given large sums of money to different institutions to be used for the betterment of man, or large sums have been donated for specific purposes and again whole estates have been willed for public use.

It is unfortunate that more of the vast wealth which has been accumulated by the few is not or should not be so placed as to be of direct benefit, welfare, comfort and advancement of the people as a whole, who require assistance, and will not and do not forget that such advantages were made possible through some broad minded and public spirited individual.

It is a great pleasure to refer to Mr. Andrew J. Macky, an old resident of the State of Colorado, who willed to the Colorado State University a sum sufficient for the erection of a building, cuts of which appear in this issue.

The building was erected for auditorium and administration purposes. The matter of construction and designing was placed in the hands of A. M. Gove and T. F. Walsh, architects of Denver, who caused the contracts to be let in September, 1909.

The building is built of what is known as St. Vrain stone and trimmed with Indiana Buff limestone. The St. Vrain stone is of a reddish brown color and is very hard and durable. This stone was laid in broken ashlar, having a rock face, the limestone trimmings being finished with a rubbed surface.

The building faces directly to the south and is 223 feet from east to west and 221 feet from north to south and 90 feet from grade to the highest point. It contains administration departments, art room and some class rooms in the east and west wings, as well as the auditorium proper.

The auditorium is 90 feet wide and 160 feet deep and has a seating capacity of 3,000. In connection with this a stage has been provided, being 30 feet deep and 90 feet wide.

A large banquet room occupies the space below the auditorium.

Eighteen exits have been provided from the auditorium, making a total opening of 140 feet, which could be used in case of emergency.

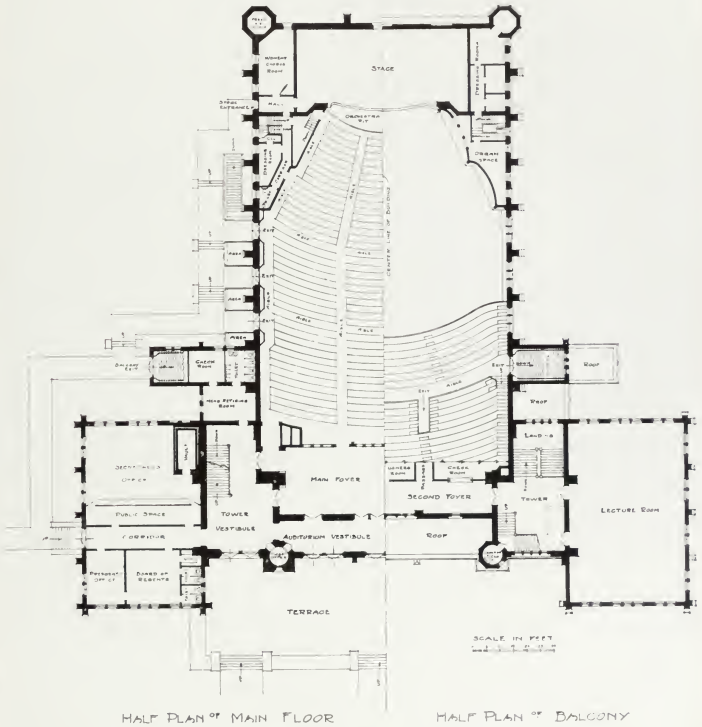
The electric light is provided from the University power plant and the steam for heating purposes comes from the same source, both of which are carried from the plant to the building in an underground tunnel.

Electrically driven fans, being 78 inches in diameter, will distribute the heat to various parts of the building.

South Front, Macky Auditorium,
Boulder, Colo.
Gove & Walsh, Architects, Denver, Colo.

View from South East.

View from North East, Macky Auditorium,
University of Colorado, Boulder, Colo.
Gove & Walsh, Architects, Denver, Colo.



HALF PLAN OF MAIN FLOOR

HALF PLAN OF BALCONY

Macky Auditorium,
University of Colorado, Boulder, Colo.
Gove & Wells, Architects, Denver, Colo.

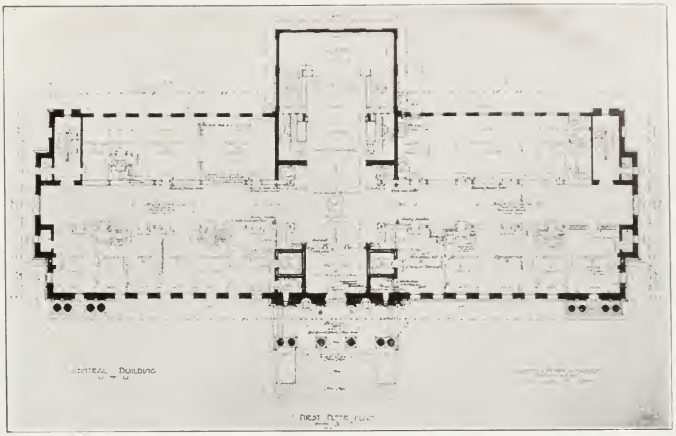
The Liverpool & London & Globe Insurance Company Building,
San Francisco.
Wm. B. Faville, Architect, San Francisco.

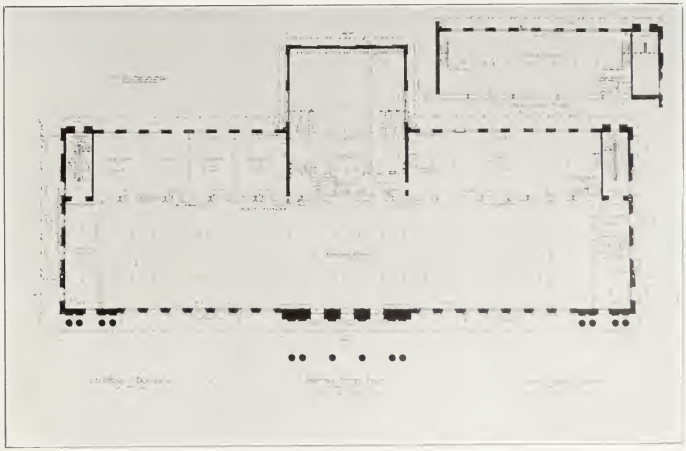
Detail of Main Entrance
The Liverpool & London & Globe Insurance Company Building,
San Francisco.
Bliss & Faville, Architects, San Francisco.

Interior.
The Liverpool & London & Globe Insurance Company Building,
San Francisco.
Bliss & Faville, Architects, San Francisco.

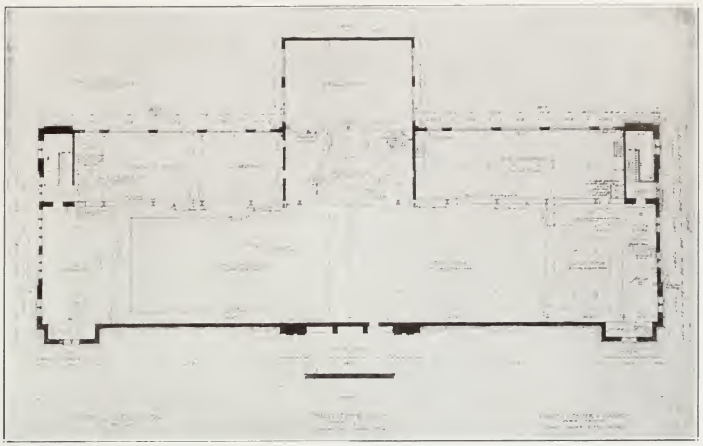
Administration Building
University of Utah, Salt Lake City, Utah
Carson & Eberle and Hyrum Pierce, Associated Architects
Salt Lake City, Utah

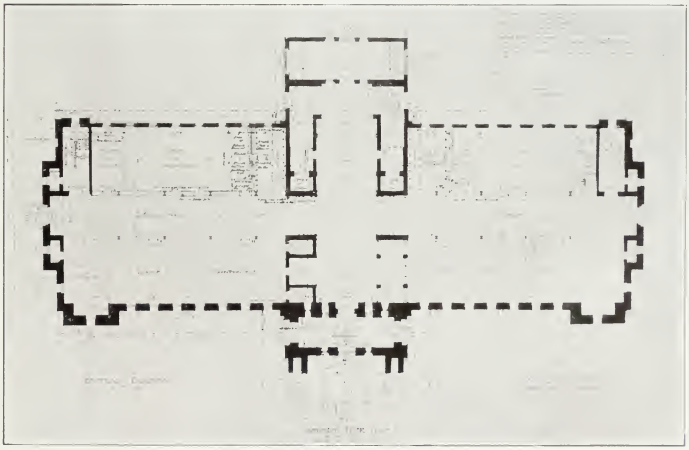
Detail of Main Entrance, Administration Building
University of Utah, Salt Lake City, Utah
Cannon & Fetter and Ramm Hansen, Associated Architects
Salt Lake City, Utah





Floor Plans of the Administration Building
University of Utah, Salt Lake City, Utah
Cannon & Fisher and Ramon Grover, Associated Architects
Salt Lake City, Utah





Floor Plans of the Administration Building,
University of Utah, Salt Lake City, Utah
Cannon & Cotter and Ramon Hauser, Associated Architects,
Salt Lake City, Utah.

THE AMERICAN INSTITUTE OF ARCHITECTS

The Octagon, Washington, D. C.

OFFICERS FOR 1914.

President	R. Clipston Sturgis, Boston, Mass.
First Vice-President	Thomas R. Kimball, Omaha, Neb.
Second Vice-President	Frank C. Baldwin, Washington, D. C.
Secretary	D. Knickerbacker Boyd, Philadelphia, Pa.
Treasurer	John L. Mauran, St. Louis, Mo.

BOARD OF DIRECTORS

For One Year

Irving K. Pond, Stenway Hall, Chicago, Ill.
John M. Donaldson, Penobscot Building, Detroit, Mich.
Edward A. Crane, 1012 Walnut St., Philadelphia, Pa.

For Two Years

Burt L. Fenner, 160 Fifth Ave., New York, N. Y.
C. Grant LaFarge, 25 Madison Sq. N., New York, N. Y.
H. Van Buren Magonigle, 7 West 38th St., New York, N. Y.

For Three Years

Octavius Morgan, 1126 Van Nuys Bldg., Los Angeles, Cal.
W. R. B. Willcox, Central Bldg., Seattle, Wash.
Walter Cook, New York, N. Y.

Auditors

Thomas J. D. Fuller, 800 Seventeenth St., Washington, D. C.
Robert Stead, 706 F Street, Washington, D. C.

San Francisco Chapter, 1881—President, G. B. McDougall, Russ Building, San Francisco, Cal. Secretary, Sylvain Schnaittacher, First National Bank Building, San Francisco, Cal.
Chairman of Committee on Public Information, William Mooser, Union Trust Building.
Chairman of Committee on Competition, Geo. B. McDougall, 235 Montgomery St.
Date of Meetings, third Thursday of every month; annual, October.

Southern California Chapter, 1894—President, Robert B. Young, 701 Lankershim Building, Los Angeles, Cal. Secretary, Fernand Parmentier, Byrne Building, Los Angeles, Cal.
Chairman of Committee on Information, W. C. Pennell, Bryne Building, Los Angeles.
Date of Meetings, second Tuesday (except July and August), (Los Angeles).

Oregon Chapter, 1911—President, Morris H. Whitehouse, Wilcox Building, Portland, Ore. Secretary, Ellis F. Lawrence, Chamber of Commerce Building, Portland, Ore.
Chairman of Committee on Public Information (not known).
Date of Meetings, third Thursday of every month, (Portland); annual, October.

Washington State Chapter, 1894—President, Charles H. Alden, Cary Building, Seattle, Wash. Secretary Arthur R. Loveless, 601 Colman Building, Seattle.
Chairman of Committee on Public Information, Chas. H. Alden, Cary Building, Seattle (till further notice send all communications to A. L. Loveless, 620 Colman Building, Seattle.)
Date of Meetings, first Wednesday (except July, August and September), (at Seattle except one in spring at Tacoma); annual, November.

San Francisco Chapter, A. I. A.

IMPORTANT NOTICE

To the Members of the San Francisco Chapter, A. I. A.:

Note carefully the list of the new Standing Committees. If your name appears as the Chairman or as a member of a Committee, you are expected to act with the Committee named, without further notice.

GEO. B. McDOUGALL,
President.
SYLVAIN SCHNAITTACHER,
Secretary

December 18th, 1913

The regular monthly meeting of the San Francisco Chapter, of the American Institute of Architects was held at the Tait-Zinkand Cafe, on Thursday evening, December 18th, 1913. The meeting was called to order at 8:05 p. m. by Mr. Geo. B. McDougall.

There were twenty-three members present and Mr. Charles H. Alden, President of the Washington State Chapter; Mr. W. H. Crocker of New York, Associate Editor of the American Architect; Mr. L. J. Flynn, editor of the Pacific Coast Architect; Mr. F. V. Santangelo a member of the Oregon State Chapter; and Mr. L. A. Upton, of San Francisco were the guests of the Chapter.

MINUTES

The minutes of the regular meeting of November 20th, 1913, were read and approved.

STANDING COMMITTEES

Sub-Committee on Public Information, A. I. A.

Mr. Mooser, for this Committee, had nothing new to report.

Sub-Committee on Competitions, A. I. A.

Mr. Mooser, for this Committee, reported that the Committee had cognizance of several unauthorized competitions, but no definite information to report yet.

SPECIAL COMMITTEES.

Committee to Audit Books of the Secretary-Treasurer.

Mr. Bernard J. Joseph, for this Committee, read a written report, which was ordered received, and the committee discharged with thanks.

COMMUNICATIONS

The following communications were received and ordered placed on file:

From the State Board of Architecture in regard to uncertificated architects; from Glenn Brown, Secretary A. I. A., acknowledging receipt of notification of resignation of Mr. Llewellyn B. Dutton. Letters from Iowa, Colorado and Michigan Chapters regarding the new proposed Amendment, from the Washington State Chapter, requesting membership at Visit of any of our members to Seattle; from the Executive Committee of the Pacific Central requesting changes in the Uniform Competition; Clipping from a Portland newspaper announcing award to be made by Mr. C. Alexander Wright of the 1915 and a copy of the Quarterly Statement.

UNFINISHED BUSINESS

The next order of business being the election of President and of one Trustee, Mr. Edgar A. Mathews took the chair, and there being no other nomination, the Secretary was directed to cast a ballot for Mr. Geo. B. McDougall for the office of President. Mr. McDougall was thereupon declared elected for the office of President for the current term.

There being no other nomination, the Secretary was directed to cast a ballot for Mr. W. B. Faville for the office of Trustee. Mr. Faville was thereupon duly declared elected the Trustee for the current term.

NEW BUSINESS

The communication from the State Board of Architecture, giving the opinion of their attorney in the Marin County matter, was referred to the Committee on Relations with the State Board of Architecture, to be named later.

The joint reports of Messrs. Mooser and Schulze as the Chapter's delegates to the New Orleans convention, were read in part by both gentlemen, and at the conclusion were ordered received placed on file, and the delegates to receive the thanks of the Chapter.

The Chair announced the appointment of the following Standing Committees to serve the Chapter for the current year:

Board of Directors.
Geo. B. McDougall, Chairman; Edgar A. Mathews, Sylvain Schnaittacher, W. B. Faville, Henry A. Schulze.

Sub-Committee on Public Information.
William Mooser, Chairman; Sylvain Schnaittacher, Geo. B. McDougall.

Sub-Committee on Competitions, A. I. A.
Geo. B. McDougall, Chairman; Sylvain Schnaittacher, William Mooser, Hermann Barth, Edw. G. Garden.

Legislative Committee.
Edgar A. Mathews, Chairman; Mathew O'Brien, Albert Schroepfer, Rudolph A. Herold.

Building Laws Committee.
Wm. A. Newman, Chairman; Elmer Jerome Kraft, Leo J. Devlin, Kenneth MacDonald, Jr.

Education Committee on Practice.
Smith O'Brien, Chairman; Ralph Warner Hart, Wm. A. Newman, Thomas J. Welsh.

Architectural League and Education.
August C. Headman, Chairman; Arthur Brown, Jr., John Albert Baur.

Sacramento Committee on Chapter Affairs.
James Seadler, Chairman; Rudolph A. Herold, Geo. C. Sellon.

Oakland Committee on Chapter Affairs.
Chas. W. Dickey, Chairman; Louis S. Stone, Fred Duane Voorhees.

San Jose Committee on Chapter Affairs.
Wm. Binder, Chairman; Geo. W. Page.

Home Industry League Committee.
Henry A. Schulze.

Chamber of Commerce Committee.
Sylvain Schnaittacher.

Civic League Committee.
Geo. B. McDougall, Chairman; Sylvain Schnaittacher.

Housing Association Committee.
Bernard J. Joseph, Chairman; Geo. Adrian Applegarth.

Quantity Surveying Committee.
G. W. Wright, Chairman; Wm. H. Crim, Jr., Frank T. Shea.

Committee on 1915 Convention.
James W. Reid, Chairman; W. D. Bliss, Geo. W. Kelham, Charles E. Hodges, O. G. Traphagen.

Committee on Relations With State Board of Architecture.
Thomas J. Welsh, Chairman; Milton Lichtenstein.

The guests of the evening, Messrs. Alden, Crocker, Flynn, Narramore, and Upton, by invitation of the Chair, briefly addressed the meeting.

Mr. Garden, having brought up the question as to the functions of the Educational Committee on Practice with reference to the activity of this Committee during the previous term, Mr. Mathews stated that an elaborate program had been prepared by the previous Committee, but had not been carried out through the disinclination of the Chairman to act. A discussion followed on the desirability of having professional papers or a symposium at frequent intervals under the auspices of this Committee.

ADJOURNMENT

There being no further business before the Chapter, on motion duly made, seconded and carried, the Chapter adjourned at 11 o'clock.

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Oregon Chapter, A. I. A.

Report of Meeting Held Dec. 17th, 1913, at Commercial Club Bldg., Portland, Ore.

Meeting called to order by President Whitehouse.

The following members answered the roll call: Messrs. Whitehouse, Wilson, Mayer, Bennes, Holford, Doyle, Hogue, Beckwith, Thompson, Lazarus and Lawrence.

Minutes of the meeting on November 20th, as printed, were approved.

Minutes of the Executive Committee, meeting held December 2, 1913, read and approved.

Minutes of the Executive Committee meeting, held December 15, 1913, read and approved.

Reports of Committees

1. Doyle, Chairman, Committee of Professional Practice:

"Your committee on Professional Practice expects to make a report at the next monthly meeting of the Chapter. We are working on a minimum schedule of charges that we hope to be able to recommend for adoption."

Ordered filed.

2. Fouilhoux, Chairman, Committee on Program and Entertainment:

"I have the following to offer in the way of suggestions for Chapter dinners:

"These dinners to be held quarterly and be made as attractive as possible to the members of the Chapter. I had a talk with the manager of the University Club and we can secure the use of the private dining room in the Club, which can accommodate 24 people. As our average has not been over seventeen or eighteen, I think we can safely count on using the University Club's private dining room. We could have a very substantial dinner, including appetizers, before dinner and choice of beer or claret during dinner for $1.50 a plate, and I would recommend that we adopt a program along those lines for our quarterly dinners."

Upon motion made by Mayer and seconded by Mr. Doyle, report was accepted.

3. Holford, Chairman, Education Committee:

"In accordance with instructions given at last monthly meeting, your committee on Education begs to submit the following report as to condition of the Architectural Club, both as to finances and to membership:

Cash in Bank

Regular Club account	$ 20.81	
Exhibition account	10.93	
Bills to be collected on exhibition account	90.00	
Unpaid dues	35.00	
	$157.74	
Yearly income from dues if all members pay		$858.00
Rent from Floral Society $5.00 per month		60.00
		$918.00
Amount of back dues doubtful of collection		$227.00

"If these are subtracted from the bills to be collected by the club, there will be available $345.74.

Yearly expenses		$918.00
Rent, $57.50 per month	$690.00	
Light average $2.00 per month	24.00	
Wood, 3 cords, $8.75	26.25	
Piano	48.00	
	$788.25	
Yearly surplus		$129.75

"The Club Treasurer, however, considers that there will be a loss of income from doubtful members, men who are now in arrears and men leaving town, of $244.00, making a yearly deficit of $144.25.

"The membership list shows a total of 93 members. Of these are 5 architects; 7 senior members, 4 junior members, 8 associate members, whom the Treasurer classes as doubtful, some being in arrears, and some out of town. If these were dropped from the membership there would be a net membership of 73.

"Your committee finds that there are several Chapter members in arrears for dues, and also several chapter members who are not members of the Club.

"Believing that the Club is worthy of our support and can fill a very necessary part in the upbuilding of the profession, your committee would recommend that the Chapter appoint a special committee to cooperate with the Club Treasurer in an effort to collect the back dues among the chapter members, and with the club officers to devise a means of increasing the Club's membership and make it of more value to the profession.

"Your committee feels that every chapter member should be a member of the Club."

Upon motion made by Mr. Wilson and seconded by Mr. Thompson, report was accepted. In an informal discussion of the subject, Mr. Mayer remarked that the support of the Architectural Club fell too strongly upon the architects and that there should be more interest taken on the part of the draughtsmen, and that the financial condition of the club was largely due to the members themselves. Mr. Beckwith pointed out that $2000 had been invested in the quarters and that it should not be allowed to lapse.

Mr. Doyle suggested that other organizations be interested to use the quarters.

Mr. Holford suggested that lack of janitor service was a great drawback.

4. Wilson, Chairman, Membership Committee:

"Your committee on membership has taken up the advisability of reclassifying dues reduction to members who are non-residents of Portland, and therefore cannot participate in the meetings of the Chapter. The majority of the committee feel that the present rules of $6.00 a year is too low, much to-task of the non-resident members, in view of the many advantages which they will derive from being members of the Chapter. We think they should receive the minutes of the meetings the same as the local members so as to enable them to keep in touch with what the chapter is doing. It must also be remembered that in cases of competitions, as well as local work, which they may be directly interested in, they would favor the co-operation and protection of the chapter, which they would not have if not members of the chapter. Therefore, those outside of Portland would get the same benefit from the chapter as the local men would. This is such a broad question we feel it should be brought on for discussion at a meeting before it is put to a vote.

"We have been unable so far to get certain to many of the architects outside of the chapter who we consider eligible to become members of same but at the next meeting hope to be able to report more fully on those we have approached."

Upon motion of Mr. Doyle, seconded by Mr. Beckwith, the report was accepted.

5. Chester Hague, Chairman, Committee Quantity Survey:

"I beg to submit the following report as Chairman of the Chapter Committee on Quantity Survey. The resolution favoring the Quantity Survey, which was amended and endorsed at the last meeting of the chapter, was submitted to the Portland Association of members of the American Society of Civil Engineers on November 24th, and was endorsed by that organization after being amended by adding the words 'as applied to structural engineering.' The resolution was also submitted to the Oregon Society of Engineers at its last meeting on December 11th, and was referred to a committee of three for report at the next meeting."

Report ordered filed.

Mr. Doyle, Chairman, Rose Festival Committee, reported that several meetings had been held and that the Rose Festival people apparently were favorable to the recommendations of the Architectural Committee.

BALLOTS ON MEMBERSHIP

President Whitehouse appointed Messrs. Beckwith and Thompson as tellers who reported that Mr. Frederick Stanley Allyn, W. B. Patterson and Lee Hawley Hoffman were elected to membership.

COMMUNICATIONS READ

Resignation from Mr. Frank Logan was read. Upon motion of Mr. Doyle, seconded by Mr. Wilson, resignation was not accepted. President appointed Messrs. Lazarus and Beckwith a committee to see Mr. Logan and endeavor to persuade him to reconsider his action.

Competition programme for the Eugene High School was presented by the Secretary. Proving to be contrary to the code of competitions, the Secretary was instructed to call the attention of the members of the Chapter.

Communications from Judge R. S. Bean were read asking the Chapter to appoint a committee for a conference with a committee from the Board of Regents of the State University in regard to the method to be pursued for the selection of an architect for the new buildings.

President's reference to W. B. Mojary, chairman of Committee on Competitions, asking for advice on possible competition including a 5 per cent fee and a flyer on which the Board of Regents would award the majority, was read. Mr. Mojary's telegram in reply, was as follows:

"Institute is not likely to approve competition under six per cent unless under extraordinary circumstances. This action is based on fact that Government gives to the owner the services of a number of architects and the successful competitor is put to much additional expense. A majority of city architects would probably be inclined to the preferred six per cent fee, better address."

Communication from Ira Lewis in regard to Lewis and Clark Exposition, in connection with the proposed amendment to the Mesplacher Tract Law, was read. Letter was ordered filed.

It was moved, seconded and carried that the Secretary be instructed to pay one-half of $75.00 to the Builders' Exchange as soon as funds permitted, and that the Executive Committee investigate the necessity for an assessment.

It was moved by Mr. Wilson, seconded by Mr. Holford, that Messrs. Kayer, Logan, Hogue, Whitehouse and Lawrence constitute a committee to confer with the special committee from the Board of Regents of the State University.

Motion accepted.

Motion made by Mr. Doyle and seconded by Mr. Beckwith gave above committee power to act.

Mr. Thompson moved, Mr. Wilson seconded, that meeting adjourn.

December 13th, 1913.

Multnomah County Commissioners,
Court House, City.
(Attention of Mr. Rufus Holman.)

Gentlemen:

The Oregon Chapter of the American Institute of Architects, through its Executive Committee, respectfully suggests in view of the importance of the Inter-State Bridge over the Columbia River that your Commissions invite as consulting advisory architects a Washington architect and an Oregon architect to serve gratuitously in aiding the Commissions on architectural features of the bridge.

We would suggest that the selection be made from the State Chapters of the American Institute of Architects from a list submitted to the Commissions by the Chapters of both states.

We suggest also that an architect be employed by the Commissions in conjunction with the engineer, or if this is not feasible that the engineer's contract include the services of an architect paid by him but subject to the approval of your Honorable body. Bridges throughout the country of such importance as this structure, will have invariably used the services of an architect in conjunction with the engineer.

We trust that these suggestions will be received by you in the spirit in which they are offered.

Yours very truly,
(Signed) ELLIS F. LAWRENCE,
Secretary, Oregon Chapter, A. I. A.

Approved by:
Doyle, Lazarus, Whitehouse, Johnson, Mayer.

Portland, Ore., December 20th, 1913.

Mr. Morris H. Whitehouse,
President Oregon Chapter, A. I. A.,
Wilcox Building, Portland, Oregon.

My dear Mr. Whitehouse:—

I desire in behalf of the Committee of the Regents to convey to you, and through you to your Committee and Chapter, our thanks for the very agreeable interview accorded us last evening, and especially for the sympathetic desire manifested by you all to aid us in reaching the best solution of the problem before us. Whatever the outcome may be, I assure you your kindly attitude is keenly appreciated and that we are greatly obliged to you.

Our Committee has reached no conclusion. Two of the members were not present last evening, and of course will have to be consulted. Some of those present hesitated about a competition on account of the expense and delay incident thereto, and felt that the Committee should report to the Board advising the selection of an architect and giving him the commission. Personally, I have no hesitancy in saying that I am inclined to the view that a limited competition in accordance with the rules of your Association would, under all the circumstances, be the most satisfactory method of procedure, but I am only one among several, and my views may not appeal to the majority in the final outcome.

Yours very truly,
(Signed) R. S. BEAN.

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Washington State Chapter, A. I. A.

The January meeting of the Washington State Chapter American Institute of Architects was held at the Arctic Club January 5th, with twelve members present.

Messrs. Clancy N. Lewis, editor of the Pacific Builder & Engineer, and W. H. Crocker, associate editor of the American Architect, were present as guests.

Mr. E. B. Van Winkle, Jr., was advanced to regular membership and Mr. Richard Ellis and Earl C. Parks were voted into Junior membership in the Chapter.

A vote of thanks to the Louisiana Chapter for its hospitality to the Washington State Chapter delegates to the convention was passed. An interesting report of the delegates, Messrs. Alden and Sayward, was read by Mr. Bebb in the absence of the delegates.

Mr. Crocker and Mr. Lewis spoke entertainingly to the Chapter of matters concerning the architectural profession in which they were interested.

The subject, "Quantity Survey System," was informally discussed and it was decided to have a full discussion of the same at a later meeting.

ARTHUR L. LOVELESS,
Secretary.

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Southern California Chapter, A. I. A., Meet

The sixty-eighth meeting of the Southern California Chapter of the American Institute of Architects was held at the Hollenbeck Cafe, Los Angeles, California, on Tuesday, January 13, 1914.

The meeting was called to order at 7:40 p. m. by Vice-president A. C. Martin.

The following members were present:

A. L. Acker	John Parkinson
J. E. Allison	Fernand Parmentier
J. J. Backus	H. M. Patterson
Joseph J. Blick	W. C. Pennell
W. E. Erkes	T. F. Power
Lyman Farwell	A. F. Rosenheim
Homer W. Glidden	F. L. Stiff
John C. Hillman	W. J. Saunders
J. W. Krause	C. F. Skilling
John P. Krempel	P. J. Van Trees
A. C. Martin	J. T. Vawter
H. H. Martin	Aug. Wackerbarth
S. B. Marston	Albert R. Walker
B. M. Morris	H. F. Withey
O. W. Morgan	F. R. Schaefer
S. T. Norton	Wm. Henry Willson
Robert H. Orr	

As guests of the Chapter were present W. S. Davis, John Bowler and E. J. Clemens of the Builder and Contractor, and William E. Prine of the Southwest Contractor.

The minutes of the Sixty-seventh meeting were read and adopted.

For the Chapter's Committee appointed to confer with the Master Builders Association, the secretary read a letter from the Association to the Chapter's Committee. This subject was ordered laid over for the following meeting for further report and discussion.

Communications were next read as follows: From F. C. Baldwin, Chairman of the Committee on Pub-

lications, A. I. A., requesting the names of local clubs and other civic bodies who might be interested in the Journal of the American Institute of Architects. The secretary was instructed to reply to this communication and comply with the request, also to recommend that the Journal be sent to the Los Angeles City Council and Housing and Art Commissions.

From Octavius Morgan, relating incidents of his trip abroad and offering his greetings to the members of the Chapter.

From the Los Angeles Builders Exchange, requesting the Chapter's co-operation in matters of mutual interest to Architects and Builders. This matter was placed in charge of the Chapter's Sub-committee on Public Information.

From the department of buildings, Los Angeles Board of Public Works, calling attention of the Chapter's members to the recent amendments to the building ordinances concerning the issuing of building permits. This communication was ordered filed.

From the National Conference on City Planning; this was also ordered filed.

From Glenn Brown, retiring secretary of the American Institute of Architects, congratulating the Chapter upon its accomplishments and co-operation with the Institute during his term of office. The secretary was instructed to reply to this communication, expressing the Chapter's high sense of gratitude and appreciation to Mr. Glenn Brown for the valuable services he had rendered to the Institute during his fifteen-year term of office, on motion made by John P. Krempel, seconded by A. F. Rosenheim, and duly carried.

From W. R. B. Willcox, newly elected director of the Institute from Seattle, requesting the report of delegates of this Chapter to the forty-seventh annual convention of the Institute and offering his services to co-operate in the interests of this Chapter in the absence of Mr. Octavius Morgan, director of the Institute from Southern California.

From the Costumes Committee of the St. Louis Pageant, extending invitation to the members of this Chapter to enter into competition for costumes, etc., for the St. Louis Pageant to be held in May, 1914. This communication was ordered filed.

A circular of information from the American Federation of Arts, together with a program of exhibition of Architectural designs, executed by students in the Society of Beaux-Arts Architects. This communication was ordered filed.

The chairman next called for a report of the Chapter's delegates to the forty-seventh annual convention of the Institute, and a summary report was read by E. Parmentier, followed by verbal reports by A. F. Rosenheim and A. C. Martin. On motion made by John P. Krempel, seconded by Aug. Wackerbarth and duly carried, the delegates' report was ordered spread upon the minutes, and the thanks of the Chapter extended to the delegates.

To Mr. R. B. Young, president of the Chapter and confined to his home through illness, the secretary was instructed to address on behalf of the Chapter, a letter of sympathy and regrets at his absence, on motion made by John P. Krempel, seconded by Lyman Farwell, and unanimously carried.

On the subject of the California State law of 1872 concerning competitions, Mr. T. E. Allison read a letter from Mr. Edward Hyatt of Sacramento, California, State Superintendent of Education. Mr. Hyatt, in this letter stated that the California State law of 1872, governing competitions for plans and public buildings was inoperative, and he had notified every school district in the state to that effect.

After various minor discussions, the meeting adjourned at 9:40 p. m.

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San Francisco Chapter, A. I. A.

The regular monthly meeting of the San Francisco Chapter of the American Institute of Architects was held at the Tait-Zinkand Cafe, on Thursday evening, January 15th, 1914. The meeting was called to order at 8:15 o'clock by Mr. Geo. B. McDougall.

There were fourteen members present.

MINUTES

The minutes of the regular meeting of December 18th, 1913, were read and approved.

STANDING COMMITTEES

There was nothing to report from any of the Standing Committees with the exception of the Educational Committee on Practice, which was as follows: Mr. Smith O'Brien, Chairman, reported that his Committee had arranged that, at the next meeting of the Chapter, Mr. Lewis G. Maurer would read a paper on "Water Proofing"; and the Committee had in contemplation speakers for other meetings.

COMMUNICATIONS

The following communications were received and ordered placed on file:

From Glenn Brown, letters in reference to the Shea resolution, and the changing of the name of the Chapter, and a letter of farewell as Secretary of the American Institute of Architects; from the Michigan Chapter, A. I. A., minutes of the regular monthly meeting. Circular letter from Mr. Dawson Watson, Chairman Costumes Committee, St. Louis Pageant Costume Competition, asking co-operation of the Chapter with this Committee in reference to their coming Pageant, circular letters and enclosed pamphlet from the American Federation of Arts calling attention to the merits of their official magazine, "Art and Progress." A letter from Mr. Harris Allen, member San Francisco Chapter, A. I. A., asking information as to what steps the Chapter has taken with reference to the Elks' Hall Competition in Berkeley; from Mr. G. A. Wright, sample postal issued by the Kansas City Chapter, A. I. A., for meeting notices. Three letters from the Portola Festival Finance Committee, soliciting subscriptions to cover debt incurred during the last Portola Festival; from the Daily Journal of Commerce in reference to the candidacy of Mr. A. C. Ralphson, as a member of the Foreign Trades Commission. Circular from the General Contractors Association in reference to the controversy between the local plasterers' union No. 66 and the Building Trades Council; later letter from the same organization, stating the near end of the dispute; circular letter from the General Contractors' Association, asking the co-operation of the members of the San Francisco Chapter in the dispute between the plasterers' union and the carpenters' union. Copy of the Pacific Coast Architect, The Improver, Architecture and Building, and the Journal of The Royal Institute of British Architects, and copy of the Quantity Surveyor, reprint from "The American Architect," giving article by Mr. G. Alexander Wright, S. F. Chapter, A. I. A., on quantity surveying, letter and pamphlet from the National Conference on City Planning 1913 Catalogue, Exhibition Architects' League of Memphis. Letter from Mr. J. M. Cleary, Landscape Architect, calling attention to the drainage done during the recent storm at the Civic House lately from the San Francisco Architectural Club, asking support of Chapter for 1915 Exhibit.

UNFINISHED BUSINESS

There was no unfinished business.

NEW BUSINESS

On motion duly made, seconded and carried, the Secretary was directed to place in full on the minutes of the Chapter, letter received from the American Institute of Architects under date of December 17, 1913, which is as follows:

December 17, 1913.

Mr. Sylvain Schnaittacher, Sec'y,
San Francisco Chapter, A. I. A.,
San Francisco, Cal.

Dear Sir: At the meeting of the Board of Directors in New Orleans November 30th, 1913, your telegram as Secretary of the San Francisco Chapter was read, stating that the Shea Resolution had been withdrawn and expunged from the minutes of the Chapter at its meeting November 20th. I was requested by the Board to express to the San Francisco Chapter the appreciation of the Board for the loyalty of the San Francisco Chapter toward the Institute, by its action in this matter. Sincerely yours,

(Signed) GLENN BROWN,
Secretary.

The communication from Mr. Harris Allen with reference to the Competition for the Elks' Hall Building at Berkeley was referred to the Board of Directors, as was also the letter from the San Francisco Architectural Club in re Architectural Exhibit in 1915.

The Secretary was directed to acknowledge receipt of letters from the General Contractors' Association.

On motion duly made, seconded and carried the Secretary was directed to notify the Panama-Pacific International Exposition that the Chapter had been instrumental in the selection of Los Angeles as the convention city for 1915, and that San Francisco would be included in the itinerary of the visiting architects, and that the Chapter had a Committee for the purpose.

Certain amendments to the Constitution and By-Laws of the Chapter were suggested by Mr. Mooser, and discussed. The following amendments to the Constitution and By-Laws were read and, in accordance with the present By-Laws, the Secretary was directed to forward copies of the same to the members for a letter ballot. Article VI, Section 1 of the Constitution was altered to read:

ARTICLE VI

Section 1. The Constitution may be added to, altered or amended upon a two-thirds vote of the members voting, of all Institute and Chapter members in good standing; provided, that at least twenty days previous notice of proposed change shall have been sent by the Secretary to each Institute and Chapter member, who is qualified to vote. Vote to be obtained by letter ballot.

Article XI, Section 1 in the By-Laws was altered to read as follows:

ARTICLE XI

Section 1. These By-Laws may be added to, altered or amended at any regular meeting of this organization, provided that the proposed amendment shall have been submitted and read at a previous regular meeting or special meeting called for that purpose, and also a copy thereof in printed or written form delivered or mailed to each member at least twenty days prior to the date of proposed final action thereon. A two-thirds vote of all members voting shall be necessary to final adoption. Vote to be obtained by letter ballot.

The other amendments discussed were referred to a Special Committee on the Revision of the Constitution and By-Laws as follows: Messrs. William Mooser, Edgar A. Mathews, and Sylvain Schnaittacher.

The Secretary was directed to communicate with the New York and Philadelphia Chapters as to the operation of the Chapters with reference to Junior Membership.

The Chair announced with regret that since the last meeting the Chapter had lost from its membership thru death Ernest Martin Hoen of Sacramento, and F. H. Martens of San Francisco. The Secretary was directed to send suitable letters of condolence and sympathy, expressing the regret of the Chapter at the demise of the deceased members.

ADJOURNMENT

There being no further business before the Chapter on motion duly made, seconded and carried, the Chapter adjourned at 10:35 o'clock. Subject to approval.

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San Francisco Architectural Club.

At the semi-annual business meeting of the San Francisco Architectural Club, held January 7, 1914, the following officers were elected: President, George Greenwood; Vice-President, Charles P. Weeks; Secretary, Albert R. Williams; Treasurer, William D. Sherman; Directors, Henry A. Thomsen and James A. Magee.

William A. Garren was appointed to fill the unexpired term of George Greenwood.

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SAN DIEGO

Change of Officers

At a meeting of the San Diego Architectural Association held recently, J. B. Lyman, of the firm of Bristol & Lyman, was elected president of the organization for the coming year. Cressy, of Quayle Bros. & Cressy, was chosen vice-president, and Robert Halley, secretary and treasurer.

W. S. Hebbard, the retiring president, held his office for the last three years.

"It is owing to the efforts of Mr. Hebbard," said the president, Mr. Lyman, "that the organization has been placed on a firm foundation. It is now hoped that during the coming years the association will widen its scope and become a potent factor in the upbuilding of the city."

The association has 25 members.

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Trade Notes

Architect J. Jay Knapp of Los Angeles, has removed his office, and is now located at 1028 South Hope Street.

Architect Thomas Hooper, Victoria, B. C., has returned after spending several months in London and Paris.

School Architect F. A. Naramore, Portland, Ore., was a recent visitor in San Francisco on his way to Los Angeles.

Architect R. E. Heine, Portland, Ore., was a recent visitor in San Francisco on his way to Los Angeles, California.

R. J. Huntington, Pacific Coast Manager of the Otis Elevator Co., has returned from a business trip to Honolulu.

Architect George W. Eldridge, Los Angeles, has moved his office from the Los Angeles Investment Bldg., to 915 Marsh-Strong Bldg.

The Architectural Terra Cotta on the I. N. Van Nuys Building, Los Angeles, was furnished by Gladding McBean and Co., San Francisco.

Architect Carl Nuese, has recently opened offices in the Holbrook Building, San Francisco, formerly at Ecole des Beaux Arts, Paris, France.

Architect George W. Eldridge, Los Angeles, has moved his office from the Los Angeles Investment Building to the March-Strong Building.

Architect J. Flood Walker, wishes to announce that he has opened offices at No. 303 East Fourth Street, at Spurgeon Street, Santa Ana, California.

Thirty plans were submitted November 20th for the $60,000 building, to be erected by the State of Massachusetts at the Panama-Pacific Exposition.

The architectural firm of Bresemann & Durfee, of Victoria and Nanaimo, B. C., has dissolved partnership, E. J. Bresemann continuing the business in his own name at Nanaimo.

Architects Barnett, Haynes & Barnett, Los Angeles, have moved their office from the Wright & Collender Building, to 411 Brockman Bldg., Seventh Street and Grand Avenue.

Architect U. O. Long has given up his office in the Central Building, Los Angeles, and we are informed he will continue his Architectural practice from his residence office only.

N. Clarke & Sons furnish the Matt Glazed Terra Cotta, which was used in the Polychrome for the Durant School Building, Oakland, Cal. Architect J. J. Donovan, Security Bank Bldg., Oakland.

Wilbur David Cook, Landscape Architect, and R. S. Rankin and R. F. Wycoff, civil engineers associated with Mr. Cook, have moved from the Los Angeles Investment Bldg., to 915 Marsh-Strong Bldg., Ninth and Main Streets.

Architects Eager & Eager, Story Building, Los Angeles, have dissolved partnership by mutual consent. A. W. Eager will continue business in the old offices of the firm. F. O. Eager will engage in business independently.

Gladding, McBean & Co., San Francisco, furnished the architectural Terra Cotta on the Administration Building for the University of Utah, at Salt Lake City. Cannon & Fetzer and Ramm Hansen, Associated Architects.

Architect Walter B. Griffin, of Chicago, has returned after spending some time on the Pacific Coast. Mr. Griffin won first prize in an international competition for laying out plans of the new capitol building in Australia.

William H. Crocker, associate editor of the American Architect, spent a few days in San Francisco, after attending the annual convention of the American Institute of Architects, held in New Orleans the early part of December.

Architect W. C. Pennell of Austin & Pennell, Wright & Collender Building, Los Angeles, was in receipt of a Christmas present not from Santa Claus, but by a stork, whose visit came Christmas morning. Mother and daughter are doing well.

Architect Loring P. Rixford is leaving shortly for Victoria, B. C., and will be temporarily located at 805-7 B. C. Permanent Loan Bldg., where he is to prepare detail plans and specifications for the Jubilee Hospital, to cost approximately $400,000.

Architect Chas. H. Alden, President Washington State Chapter, A. I. A., of Seattle, Wash., now in charge of special Department Division of Works at the Panama Pacific Exposition, is making a trip to Seattle for the purpose of attending to some business matters.

Architect Myron Hunt of Los Angeles has been selected by the regents of the University of Arizona as advisory architect to prepare a program for a competition for the commission to design a new $150,000 building for the Arizona State University. The competition will be held in accordance with the rules of the American Institute of Architects.

Mr. A. C. Soule, Manager of The Simplex Window Co., has just returned from an extended trip to Southern California, and the San Joaquin Valley. He reports that the outlook is very favorable, particularly in his line, having secured quite a number of contracts for installing Simplex Windows.

Wallace A. Blair, a well known architect of Winnipeg, is in Victoria, accompanied by his wife. Mr. Blair is greatly enamored with Victoria and its surroundings and has purchased land in Oak Bay, on which he is building a residence. He will probably come to Victoria for good in a few months.

Architects Cannon & Fetzer, Salt Lake City, Utah, announce that the new District School Building of Grantsville, Utah, was dedicated on January 7th. This is one of the most handsome buildings of its kind in the state, costing about $65,000 and containing all modern equipment throughout.

Berry Bros., Detroit, Mich., have entered the field with a splendid House Organ, under the heading of "Luxeberry Daily News," published daily during the Fourth Annual Convention for the employees of Berry Bros., which records the many happenings of the meetings, and from the contents and the many cartoons, one should think every member was made welcome and enjoyed a good time.

Architect Hugh Braunton, of the firm of Braunton & Leibert, Vancouver, B. C., has left for the eastern states, on a business and pleasure trip. Mr. Braunton contends, that in order to do justice to oneself in the profession, it has become absolutely essential for the architect to travel much, thereby personally familiarizing himself with new ideas, especially when improvements follow one another, as rapidly as they do in the present age.

Architect Lester Hibbard of Los Angeles, has returned to this city, after spending a year and a half in Paris and Europe, in travel and study. Mr. Hibbard graduated from the College of Architecture at Berkeley, in 1909, and then took a year's post graduate work. He later was connected with the office of Architect Myron Hunt. While in Paris, Mr. Hibbard took the examinations given by the Ecole des Beaux Arts, and distinguished himself in ranking eighteenth in a class of 625.

Architects Perry & Fowler, Vancouver, B. C., have instructions from Ottawa, Canada, to proceed at once with working drawings and specifications for the new Drill Hall to be located on Commercial Drive, Grandview. Estimated cost $375,000. Building will occupy an entire block and will be constructed of steel and reinforced concrete, faced with red Pressed Brick and Denman Island Stone, all modern equipment. A notable feature is two large windows set in steel frame 60 feet high at the highest point, and 125 feet wide at the widest point.

W. W. Montague & Co., fifty-six years in San Francisco, is the oldest business house on the Pacific Coast, the founder of which is still at the helm directing its affairs.

The house was established in January, 1858, under the firm name of Locke & Montague to do a jobbing business in stoves, metals and household goods, located at 414-416 Battery street, near Washington street, then the business center of the city. The Bank of California was on the corner of Washington and Battery streets.

In 1864 there was erected expressly for Locke & Montague a brick building "away up town" 112-114-116-118 Battery street, between California and Pine

streets. In later years this location came to be known as the "Hardware Block," there being nine jobbing houses of hardware and metals in the block—Locke & Montagne being the last house to leave the location.

In 1876 S. M. Locke died and the business was continued under the firm name of W. W. Montague & Co., remaining on Battery street until 1884, in which year they removed to a five-story brick building, 310-312-314-316 Market street near Beale street, which was destroyed by fire in 1906, after which they resumed business at the corner of Polk and Turk streets.

In 1909 they moved to the building erected expressly for them, 557, 559, 561 and 563 Market street, their present location.

In the early seventies there were twenty-two jobbers of hardware, stoves and metals doing business in San Francisco, only five of which remain in business today.

W. P. Fuller & Co. have been having their yearly convention this month, which has been attended by the managers of their branches at the following points:

Sacramento, Oakland, Stockton, Los Angeles, San Diego, Pasadena, Long Beach, Cal.; Portland, Ore.; Seattle, Tacoma, Spokane, Wash., as well as their San Francisco department managers.

Several days are generally devoted to visits to their factory, where new goods that are about to be put on the market are thoroughly examined and got acquainted with. This year considerable time was devoted to their new varnish plant, which was built since the last convention. They were shown the exhaustive tests that these varnishes have been put to, and were very enthusiastic over the future of Fuller Varnishes.

At the convention all managers are expected to contribute some suggestions toward the extending of the business, and policies for the new year are discussed as well.

The enthusiasm and get together spirit of the Fuller managers is very marked, and much good from these yearly meetings is the result. They look for a very large volume of business in 1914, as the report brought in by their managers from the different sections is very encouraging.

The following branch managers were present:

Mr. C. B. Woodruff, Mr. J. S. Menefee, Mr. L. C. Hunter, Mr. C. R. Root, Mr. A. B. Cadman, Mr. D. J. Miller, Mr. F. D. Seymour, Mr. P. C. Patterson, Mr. David Williamson, Mr. C. W. Jackson, Mr. F. A. Steele, and Mr. E. E. Simmons, Mr. W. P. Fuller, Jr., and Mr. W. P. Holden, from the home office.

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CALIFORNIA

Club House—San Francisco. Class B construction three stories and basement, to cost $75,000. Architect G. Albert Lansburgh, 709 Mission street, San Francisco.

Lodge Rooms—San Francisco. Architects O'Brien & Werner have completed plans for a three-story and basement brick and steel Lodge Rooms for the San Francisco Labor Council Hall Association. Cost to be $75,000.

Hotel—San Francisco. Architect Washington J. Miller, 45 Kearny street, San Francisco, has prepared plans for an eight or ten-story Class A construction. The same architect is preparing plans for a large Class A hotel building to be erected on the corner of Ellis and Mason streets, by an eastern syndicate.

Hotel—San Francisco. Architect August Nordin, Mills Building, has completed plans for a three-story and basement reinforced concrete hotel building to cost $25,000.

Hotel Building—San Francisco. Architect Earl B. Scott, Humboldt Bank Building, has completed plans for a six-story and basement brick and steel construction hotel building for Downtown Realty Co.

Apartment House—San Francisco. Architects Fabre & Bearwald, Merchants National Bank Building, have completed a three-story and basement frame apartment house for A. Artru, to cost $17,000.

Hotel—San Francisco. Architect L. Mastropasqua, 580 Washington street, San Francisco, has completed plans for a four-story and basement reinforced concrete hotel to be erected on the southeast corner of Broadway and Parker Place, and will cost $20,000.

State Exposition Building—San Francisco. Plans are now complete for the State Exposition Building for the State of Washington by Architect A. F. Heide, 46 Kearny street. It is a three-story frame and concrete construction of classic design, and will cost $250,000.

Club House—Oakland. Architect Edward G. Garden, Phelan Building, San Francisco, has been commissioned to prepare plans for a two-story and basement club house of frame and concrete, for the Sequoia Club, to be erected on Foothill Boulevard, to cost from $40,000 to $50,000.

Stadium—Oakland. Architect J. J. Donovan, Security Bank Building, Oakland, is preparing plans for a stadium and track, concrete construction, for the Oakland Stadium Association, to be erected at Peralta Park and to cost $260,000.

Apartment House—Oakland. Architects Rousseau & Rousseau, Monadnock Building, San Francisco, have completed plans for a four-story and basement brick and steel apartment house, to be erected on the corner of Oak and Fourteenth streets, for Dr. F. A. Baird.

Courthouse—Alturas. Architect F. J. DeLongchamps, Reno, Nev., has been commissioned to prepare plans for a two-story and basement reinforced concrete courthouse for Modoc County, and will cost $90,000.

School—Eureka. Architect William H. Weeks, 75 Post street, San Francisco, has completed plans for a two-story and basement reinforced concrete High School Building, to be erected in Eureka, Humboldt County, for the Eureka Union High School District.

Residence—San Francisco. Architect Charles Edward Hodges, Bankers' Investment Building, San Francisco, has completed plans for a two-story and basement frame residence for H. J. Jones, Southern Pacific Co., to cost $20,000.

Residence—Berkeley. Architect Olin S. Grove, 2911 Telegraph avenue, Berkeley, is preparing plans for a two-story and basement frame residence for W. W. Grove, to be erected in Claremont Tract and will cost $4,500.

Residence—San Juan Capistrano. Architect A. B. Benton, 114 N. Spring street, Los Angeles, is preparing plans for a two-story and basement residence of reinforced concrete, to be erected for John Forster, and to cost $25,000.

Lodge Hall and Stores—Los Angeles. Architects Morgan, Walls & Morgan, Van Nuys Building, Los Angeles, are preparing plans for a three-story and basement Class A lodge hall and stores, for the Independent Order of Odd Fellows, to be erected at the corner of Twelfth and Flower streets.

Hotel—Los Angeles. Architects Barnett, Haynes & Barnett, Wright & Callender Building, Los Angeles, have nearly completed working drawings for an eleven-story and basement Class A hotel, to be erected on Main street, between Eighth and Ninth, for Fred Grass of San Francisco. Estimated cost $100,000.

Museum—San Francisco. Architect Lewis P. Hobart, Crocker Building, San Francisco, has completed plans for a museum to be erected in Golden Gate Park by the California Academy of Sciences. It is to be two stories high with basement, Class A construction, and to cost $600,000.

State Exhibit Building—San Francisco. Architects Wayland & Fennell have completed plans for a state exhibit building, frame construction, for the State of Idaho. The structure to cost $25,000.

Residence—San Francisco. Architect William Knowles, Hearst Building, San Francisco, has completed plans for a two-story and attic and basement frame residence for William C. Murdock, to be erected at Forest Hill. It will cost $25,000.

School—San Francisco. Architects Bliss & Faville, Balboa Building, have completed plans for a three-story and basement frame school building, for the Protestant Episcopal Bishop of California, to be erected at the corner of Potrero avenue and Twenty-fifth street for a Boys' Home. It will cost $15,000.

Hospital—San Francisco. Architects Bakewell & Brown, 251 Kearny street, San Francisco, have been commissioned to prepare plans for a five-story and basement Class A construction hospital, to be erected at the Lane Hospital at the corner of Clay and Webster streets, for the Stanford University. The cost will be $100,000.

Office Building—San Francisco. Architect J. Martyn Haenke, Story Building, Los Angeles, has prepared plans for a fourteen-story and basement office building Class A construction, to be erected on the corner of Montgomery and Bush streets. The building will occupy the entire frontage of Montgomery street with the exception of that portion at the corner of Sutter and Montgomery owned by the Donohue-Kelly people, and will cost $1,200,000.

Apartment House—San Francisco. Architect Frederick H. Meyer, Bankers' Investment Building, San Francisco, has completed plans for a five or six-story apartment house, Class C construction, for Trowbridge & Livingston, to be erected at the corner of Post and Williams Place. This building will cost from $75,000 to $100,000.

Fire House—Berkeley. Architect William H. Ratcliff Jr. First National Bank Building, Berkeley, has completed plans for a two-story and basement reinforced concrete fire house for the City of Berkeley, to be erected on the north side of Derby street, near Shattuck avenue, and to cost about $25,000.

Brick Residences—Los Angeles. Architect Frederick Henderson, 517 Lissner Building, is now ready to take bids on the erection of a three-story brick residence on Oak Knoll avenue, for Raymond Rose, pasadena Homestead.

Brick Remodeling Houses—Los Angeles. Architect L. L. Jones has completed plans for a two-story brick remodeling house, to be built at 547 San Julian street, for Julia N. Murray, to cost $30,000.

High School Buildings—Ontario, Cal. Architect Norman F. Marsh, 214 Broadway, Central Building, Los Angeles, is completing plans and specifications for rebuilding the former building of the Chaffey Union High School at Ontario.

Auditorium—Los Angeles. A steel and reinforced concrete Class A auditorium will be erected on Hope street, south of Sixth street, for the Bible Institute, and will cost $400,000.

Apartment Building—San Diego. Architect Frederick Hirshfeld, 317 Lissner Building, Los Angeles, will prepare plans for the construction of a group of apartment buildings, known as the Oriental City, for the San Diego Exposition. The buildings will be frame and stucco and cost about $150,000.

Office Building—San Diego. Architects Theodore C. Kistner has prepared plans for a two-story and basement store building, to be known as the Southern Title Guaranty Building, to be erected at 960 Third street, and to cost $125,000.

Hospital—San Diego. Architect John C. Austin has prepared plans for a six-story hospital on the corner of Pacific and Cedar streets, for the British-American Hospital Co., which will cost approximately $400,000.

Residence—Santa Barbara. Architects Roy & Soule, 156 State street, have completed plans and have opened bids for the erection of a residence for R. W. Vaughan. The architects are to prepare for Italian and Mission, and will cost $17,000.

OREGON

City Hall—Seaside. Architect F. Manson White has prepared plans for a new City Hall for Seaside, to contain fire and police departments, city administration offices, council chambers and auditorium. Estimated cost $18,000. The same architect is drawing plans for a concrete building, covering an entire block, for Alex Callender, Mayor, the cost of which will be $50,000.

Store—Portland. Architects Emil Schaefer & Son have been commissioned to prepare plans for a two-story and basement brick store at E. 62nd and Alder streets, for D. P. Thompson, Piedmont, to cost $80,000.

Mausoleum—Portland. Architects Doelker & Doane have been commissioned to prepare plans for a mausoleum, concrete construction, to be erected in Riverview Cemetery, to cost $15,000.

Business Building—Portland. Architects Camp & Doane have completed plans for a two-story brick and frame mill building, to be erected on the corner of Fifth and Oswego streets, for L. B. Gibson. Building to cost $20,000.

Warehouses—Portland. Architect F. Cudaback Bennett, Multnomah Building, Portland, have completed plans for a two-story and basement garage, storage and salesroom, for W. P. Crawford, Vancouver, Wash., to cost approximately $40,000.

Residence—Portland. Architects Lawrence & Holford have been commissioned to prepare plans for a residence, frame construction, to cost $8,500, on Larrabee street and Council Road, for F. C. Seidler.

Factory Structures—Portland. The Interstate Specialties Mfg. Co., Lumber Exchange Building, Portland, will build a one and seven-story frame factory group at Twenty-seventh and Marcum streets, to cost $400,000.

Residence—Portland. Architect Elon H. Lancaster, Chamber of Commerce Building, Portland, is preparing plans for a two-story and basement reinforced concrete residence for J. A. Beaumont, to be erected on Kenton avenue, between Seventeenth and Eighteenth streets, and to cost $50,000.

Apartment House—Portland. A two-story and basement brick and concrete apartment house will be erected by W. P. Edmunson, 28 Pontius Place, on Twenty-third street near Savier street, and will cost $35,000.

Hotel Addition, Pendleton. Architects Trautmann & Bunn (with Northwest Building, Portland) have completed plans for a three-story and basement brick hotel addition for the Pendleton Hotel Co., and to cost $35,000.

Library—Marshfield. Architect W. S. Turpen, Marshfield, Ore., is preparing plans for a one-story and basement stone library for the City of Marshfield, to cost $12,500.

Apartment House—Portland. Architect Morgan C. Tyler, Chamber of Commerce Building, Portland, is preparing plans for a two-story and basement brick and reinforced concrete apartment house for C. A. Skelton.

Residence—Albany, Ore. Architect Albert Wagner, Workmen's Co-operative, is preparing plans for a residence, and basement brick and stone foundation for the United States Government, to cost $25,000.

Schools—Corvallis, Ore. Architects Houk & Thompson, Wilcox Building, Portland, have prepared preliminary plans for a two-story and basement brick school for the Corvallis School District, to cost $75,000.

WASHINGTON

Stores and Offices—Seattle. Architect William Knuppel, Empire Building, Seattle, Wash., has prepared plans for a business and basement reinforced concrete building, to contain stores and offices, to be erected on the site bounded by Fourth, Westlake, Stewart and Olive streets, and to cost $80,000.

Theater and Stores—Seattle. Architect H. Ross, Northern Bank Building, has nearly completed plans for a two-story and basement reinforced concrete theater and stores, for the Liberty Theater, to cost $70,000.

Residence—Seattle. Architect Albert Held, Seattle, is preparing plans for a two-story and basement brick residence for C. L. Watkins, to be erected in Cliff Park and to cost $20,000.

Clubhouse—Seattle. Architects Wilson & Saxvard, Council Building, Seattle, have completed plans for a two-story and basement frame clubhouse for the Kenmore Congregational Church of Seattle, to be erected on the corner of Forty-first avenue and Kenmore Place, and to cost $10,000.

Hotel—Seattle. Architect A. Wilkeninn, Lyon Building, Seattle, is preparing plans for a four-story reinforced concrete hotel, to be erected on the Yesler Estate, at the corner of Yesler Way and Prefontaine place, and to cost $150,000.

Bank Building—Seattle. Architect Harlan Thomas, Arcade Building, is preparing plans for the construction of a two-story concrete and brick bank building for the First National Bank of Ballard, at a cost of about $12,000.

Warehouses—Tacoma. Architects Heath & Gove, National Realty Building, are revising plans for the construction of a two-story and basement concrete school construction for the Stadium High School of Tacoma, to cost $40,000.

Garage—Seattle. Architect Julius Everett, Walker Building, Seattle, is preparing plans for a garage, office, repair and general salesroom and frame construction, to be erected on the Renton Junction Tract, and to cost $75,000.

Hotel—Seattle. Architects John Graham, Lyon Building, Seattle, is preparing plans for a six-story and basement brick and steel hotel building, to be erected on the corner of Fourth avenue and Jackson street, for Mr. P. J. Murphy, and to cost $80,000.

Library—Olympia. Architect Joseph J. Wolfe, will prepare plans for a Carnegie library building, to be erected here at once, and to cost $25,000.

Schools—Seattle. Six hundred and fifty thousand dollars' worth of bond issues were voted on two new schools to be erected at once by Architect Robert Bruce, and $400,000 of this will be used on the Ballard High School at Sixty-fifth and Ninth.

Hospital—Tacoma. It is stated that will be called shortly for the construction of a county tuberculosis hospital at Lakeview; it cost $30,000. Lundberg & Matson, architects.

Hotel—Seattle Valuing. Norman Dorn are planning for the construction of a $70,000 hotel, to be four stories, and to Alex Bertin Johnson.

BRITISH COLUMBIA

Theater—Edmonton. Architects Underwood are erecting theater at $100,000 cost and a two-story and basement hotel to be started early next March for Mr. George Brown.

Apartment House—Victoria. Architect Jesse M. Warren, Victoria, has completed plans for the erection of an apartment house at Mt. Arthur and Fullerton streets.

Hospital Addition—Victoria. L. P. Macneal will prepare plans and specifications for the construction of the new Jubilee Hospital, to cost approximately $400,000.

Residence—Vancouver. Architects Twizell & Twizell, Metropolitan Building, have prepared plans for a residence of two and a half stories, to be erected at Cedar Crescent, in Shaughnessy Heights, for Mr. M. E. Morris and to cost $7,000.

Hotel—Vancouver. Architects Bregenzer & Dittler have prepared plans for a three-story brick addition to the present Imperial hotel. Estimated cost $35,000.

Hotel—Port Coquitlam. Architects Hall, McKinnon & Dodd, Vancouver, B. C., have prepared plans for a two-story hotel building, to be erected at this point.

University Buildings—Vancouver. Architects Sharp & Thompson, Dominion Building, have completed plans for the proposed University buildings at Point Grey, the maximum accommodation of which is $500,000.

Residence—Victoria. Architect J. D. Sedlar, has plans prepared for a residence for H. W. Watkis on Humboldt Road to cost $8,000.

Government Buildings—Victoria. It is reported from Victoria that plans have been completed for the proposed new printing office and new museum addition in connection with the legislative buildings at Victoria and that they will cost, with additional government buildings, $1,000,000.

Store Buildings—Victoria. Plans have been completed for the erection of new store buildings for the Hudson Bay Co., Victoria, and $450,000 is available for the structures.

Sub-postoffice—Vancouver. Architect A. Campbell has completed plans for the three-story brick and stone sub-postoffice, to be erected here and to cost $100,000.

Armory—Vancouver. Architects Perry & Fowler, Pacific Building, Vancouver, have completed plans for the erection of a $350,000 armory here, for the Dominion Government.

COLORADO.

Bank Building—Denver, Colo. Construction is to begin immediately for a six-story bank and office building by the Broadway Bank, to be erected on the corner of Broadway and First avenue, to cost approximately $60,000.

Apartment House—Denver, Colo. Architect G. W. Huntington is preparing plans for a $30,000 apartment house for Dr. A. F. Reed, to be erected at Fourteenth avenue and Pearl street.

Salesroom—Denver, Colo. Architects Gove & Walsh issued building permit to E. S. Kassler, Cooper Building, for the two-story brick salesroom to be constructed for Mr. Charles Morcom at 1344 Broadway, at the cost of $25,000.

UTAH.

Ogden, Utah. Preliminary plans have been about completed for an apartment house for Geo. W. Goddard, president of the Goddard Pickling & Preserving Co., to cost about $50,000.

Salt Lake City, Utah. Plans are being prepared by Architect N. Edward Liljenburg, 421 Newhouse Bldg., for a new school building at Garfield, by the Granite Board of Education. Building to cost approximately $30,000.

Salt Lake City, Utah. Architects Palliser & Hills are preparing preliminary plans for a new apartment hotel to be erected on East South Temple street during the coming season. Building to be of steel frame, and reinforced concrete floors, and to cost $180,000.

Salt Lake City, Utah. Architects Cannon & Fetzer, Templeton Building, are preparing plans and specifications for a new residence on the North Bench to be erected for Mr. J. M. Blair.

Salt Lake City, Utah. It is rumored that the erection of the new Salt Lake Country Club home to be built on a large tract of land about five miles southeast of this place, will be begun early in the spring. The cost will be about $30,000.

Logan, Utah. Architects Cannon & Fetzer have been commissioned by the Thatcher Brothers at Logan to proceed with plans for the new bank building and hotel which is to be erected here. Structure to be five stories high, of reinforced concrete and steel, with a buff exterior. Cost to be $150,000.

Business Block—Salt Lake City, Utah. Buildings to cost $125,000 are to be erected on the site owned by the Newhouse Realty Co. on the corner of Cactus street, Exchange Place and State street. One of the plans calls for the erection of a large marketthouse where booths and stores will be established.

Apartment House—Salt Lake City, Utah. Architects Palliser & Hills are preparing plans for an apartment hotel, a store and hotel building and up-to-date apartment house costing in the aggregate, $275,000. Property owned by Edward L. Burton and Frank Bagley.

Library Building—Salt Lake City, Utah. Plans and specifications have been prepared by Architects Watkins & Brich, Felt Building, for the erection of a Carnegie Library Building at Garland, Utah. The structure will cost $8,000.

Apartment House—Salt Lake City, Utah. Architect J. C. Craig is preparing plans for an apartment house to be erected by former Mayor John S. Bransford on the corner of First avenue and State street, to cost $80,000.

Apartment House—Ogden, Utah. Plans for a modern apartment house have been ordered by George W. Goddard, president of the Goddard Pickle & Preserving Co. Building to cost $50,000, and will be built at the corner of Madison avenue and Twenty-fifth street.

Hall—Salt Lake City, Utah. Plans are being drawn by Architects Cannon & Fetzer for the meeting house for the Eighth Ward. Building will be located on Third East between Fourth and Fifth South. Structure will cost about $20,000.

Apartment House—Salt Lake City, Utah. It has been definitely announced by E. A. Midgley, of Midgley Bros., that he has completed plans for a $40,000 apartment house to be constructed on the west side of West Temple street between Sixth and Seventh.

Car Barns—Salt Lake City, Utah. Plans have been practically completed for new Car Barns to be used by both companies in Salt Lake when completed. Buildings will cost $100,000.

Factory—Ogden, Utah. Announcement was made by E. J. Phelps, vice president of the American Tin Can Co. of New Jersey, that a factory for the manufacture of tin cans will be erected at this place within the next year, to cost approximately $250,000.

MISCELLANEOUS

Tucson, Ariz. A modern opera house to cost $50,000 is to be erected here in the very near future. The building is to have a seating capacity of 1000 persons.

School Buildings—Yuma, Ariz. Architect John Rinker Kibby, Phoenix, Ariz., has submitted plans for the new high school buildings to the trustees of the Yuma High School District, to be completed by early spring.

Armory Building—Phoenix, Ariz. Architect F. C. Hurst has completed plans for the erection of the $16,000 Armory Building to be erected on North First street. Building to have frontage of 100 feet on First and a depth of 140 feet.

Hotel Building—Phoenix, Ariz. Salim Ackel has announced that it is his intention to erect a six-story hotel building on Central avenue to cost $75,000. Plans are being prepared by Architect F. C. Hurst, 129 N. Central avenue.

Office Building—Tucson, Ariz. Plans are being prepared by Architect Sidney Mashbir for the erection of an eight-story modern office building for R. H. Kruttschnitt.

School Building—Phoenix, Ariz. Plans and specifications are now on file with Architects Peabody & Smart, Central Building, for the erection of the Industrial Arts Building for the Tempe Normal School District, at Tempe.

Passenger Station—Pocatello, Idaho. Plans are being prepared for the erection of a new passenger station for the O. S. L. R. R. Co., by Carl Stradley, chief engineer.

City Hall—Weiser, Idaho. According to T. W. Terwilliger of this place, Weiser and Washington Counties are contemplating building a new city hall and county building to cost from $125,000 to $150,000.

Office Building—Boise, Idaho. It is the intention of A. R. Crazen to erect a $100,000 building at Eighth and Jefferson streets on a quarter of the block that is now Columbia Park.

Postoffice—Pocatello, Idaho. Architect Oscar Wenderoth, Washington, D. C., has been preparing plans for a two-story and basement brick and stone postoffice for the United States Government, to be erected here.

College—Gooding, Idaho. Competitive plans for buildings for Gooding College are being prepared by Architects Ware & Trazenze, Salt Lake City; Weyland & Fennell, Boise, and George H. Carsley, Helena.

Helena, Mont. Lewis Penwell Co. has acquired a lot at the northeast corner of Lawrence street and Benton avenue and it is his intention to erect a modern apartment house on the site. Estimated cost $100,000.

Roundup, Mont. Architect J. R. Grant has been commissioned by the City Council to prepare plans and specifications for the erection of a new city jail building here.

Fort Benton, Mont. An election will be held here on April 4th, for the purpose of voting on the proposition of erecting a $50,000 county high school building at this place.

Glendive, Mont. Plans have been completed by B. Rivens, of Miles City, Mont., for a new Washington Ward School Building, to be started early next spring. Structure will be modern in every detail, three stories in height, built of concrete and pressed brick and finished in oak, and to cost $41,300.

City Hall—Bozeman, Mont. Plans are being prepared by Architects Fred F. Wilson & Co. for the erection of a new city hall, which will cost approximately $25,000 when completed.

Y. M. C. A. Building—Helena, Mont. Architects Link & Haire have completed plans for the erection of the new Y. M. C. A. Building, to cost $100,000.

Club Building—Missoula, Mont. According to President Oscar Hilding, officers of the Scandinavian Brotherhood are planning on the erection of a new lodge building here to cost about $15,000.

City Hall—Glendive, Mont. Architect Reveness, Miles City, has prepared plans for a new City Hall to be erected here. Cost of structure will be $27,000, aside from the cost of equipment.

Church—Lewistown, Mont. Architects Link & Haire, Billings, have completed plans for a new church for St. Leo's Catholics, to be erected in spring on the corner of Broadway and Second avenue. Estimated cost $60,000.

Office Building—Billings, Mont. Architects Link & Haire have been awarded the plans and specifications for the new office building to be erected by the Montana Power Co.

Reno, Nev. The Nevada Hardware & Supply Co. has completed preliminary drawings for the erection of a new fire-proof building, to be built on the site of building recently destroyed by fire. Work to cost $25,000.

Factory—Carson City, Nev. Articles of incorporation have been filed by the California No-Ice Refrigerator Mfg. Co. with a capital of $500,000. The company will purchase a site and erect a factory to manufacture and sell a new patent refrigerator.

Apartment House—Reno, Nev. George E. Holesworth has remodeled the plans for the erection of the Holesworth apartment building which will be constructed of concrete, six stories high, east of the new Carnegie library on Mill street.

TIN ROOFING TABLES

WEIGHTS, TRADE TERMS, ETC., FOR USE IN ESTIMATING

SIZES, WEIGHTS, ETC.

Roofing tin is usually furnished in two sizes, sheets 14"x20" and 20"x28", packed 112 sheets to the box.

Target and Arrow tin is furnished in three thicknesses, IX (painted, approx. 30 gauge I. C. & St'l), IX (painted, approx. 28 gauge I. C. & St'l), 2X (painted, approx. 25 gauge I. C. & St'l), etc. Weight per 100 square feet laid on the roof, about 65 lbs. for IX thickness.

COVERING CAPACITY

Flat Seam Tin Roofing.—Table showing quantity of 14"x20" tin required to cover a given number of square feet with flat seam tin roofing. A sheet of 14"x20" with 1" edge measures, when edged or folded, 13"x19" or 247 square inches, but its covering capacity when joined to other sheets on the roof is only 12½"x18½", or 231.25 square inches. In the following all fractional parts of a sheet are counted a full sheet.

No. of square feet	100	150	200	250	300	350	400	450	500
Sheets required	81	121	163	203	244	284	326	366	407
No. of square feet	550	600	650	700	750	800	850	900	950
Sheets required	447	488	528	569	610	650	691	732	772
No. of square feet	1000	1050	1100	1150	1200	1250	1300	1350	1400
Sheets required	813	854	894	935	976	1016	1057	1098	1138
No. of square feet	1450	1500	1550	1600	1650	1700	1750	1800	1850
Sheets required	1179	1220	1260	1301	1342	1382	1423	1464	1504
No. of square feet	1900	1950	2000	2050	2100	2150	2200	2250	2300
Sheets required	1545	1586	1626	1667	1708	1748	1789	1830	1870
No. of square feet	2350	2400	2450	2500	2550	2600	2650	2700	2750
Sheets required	1911	1952	1992	2033	2074	2114	2155	2196	2236
No. of square feet	2800	2850	2900	2950	3000	3050	3100	3150	3200
Sheets required	2277	2318	2358	2399	2440	2480	2521	2562	2602
No. of square feet	3250	3300	3350	3400	3450	3500	3550	3600	3650
Sheets required	2643	2684	2724	2765	2806	2846	2887	2928	2968
No. of square feet	3700	3750	3800	3850	3900	3950	4000		
Sheets required	3009	3050	3090	3131	3172	3212	3253		

A box of 112 sheets 14"x20" laid in this way will cover 180 sq. ft.

Flat Seam Tin Roofing.—Table showing number of 28"x20" sheets required to cover a given number of square feet with flat seam tin roofing. The flat seam is edged 0" take 1½" off the length and width of the sheet. The covering capacity of each sheet is, therefore, 26½"x18½", or 490.25 square inches.

No. of square feet	100	150	200	250	300	350	400	450	500
Sheets required	41	61	82	102	122	143	163	184	204
No. of square feet	550	600	650	700	750	800	850	900	950
Sheets required	224	245	265	286	306	327	347	367	388
No. of square feet	1000	1050	1100	1150	1200	1250	1300	1350	1400
Sheets required	408	429	449	469	490	510	531	551	571
No. of square feet	1450	1500	1550	1600	1650	1700	1750	1800	1850
Sheets required	592	612	633	653	673	694	714	735	755
No. of square feet	1900	1950	2000	2050	2100	2150	2200	2250	2300
Sheets required	776	796	816	837	857	878	898	918	939
No. of square feet	2350	2400	2450	2500	2550	2600	2650	2700	2750
Sheets required	959	979	1000	1020	1041	1061	1082	1102	1122
No. of square feet	2800	2850	2900	2950	3000	3050	3100	3150	3200
Sheets required	1143	1163	1184	1204	1225	1245	1265	1286	1306
No. of square feet	3250	3300	3350	3400	3450	3500	3550	3600	3650
Sheets required	1327	1347	1367	1388	1408	1429	1449	1469	1490
No. of square feet	3700	3750	3800	3850	3900	3950	4000		
Sheets required	1510	1531	1551	1571	1592	1612	1633		

A box of 112 sheets 28"x20" laid in this way will cover 381 sq. ft.

Standing-Seam Tin Roofing.—Table showing number of 14"x20" sheets required to cover a given number of square feet with standing-seam roofing. The standing seams, edged 1¼" and 1½", take 2¾" off the width; and the flat cross-seams, edged ¾", take 1¼" off the length of the sheet. The covering capacity of each sheet is, therefore, 11¾"x18¾", or 212.34 square inches. In these tables fractional parts have been counted as a full sheet.

No. of square feet	100	150	200	250	300	350	400	450	500
Sheets required	85	128	170	213	255	298	340	383	425
No. of square feet	550	600	650	700	750	800	850	900	950
Sheets required	468	510	553	595	638	680	723	765	808
No. of square feet	1000	1050	1100	1150	1200	1250	1300	1350	1400
Sheets required	850	893	935	978	1020	1063	1105	1148	1190
No. of square feet	1450	1500	1550	1600	1650	1700	1750	1800	1850
Sheets required	1233	1275	1318	1360	1403	1445	1488	1530	1573
No. of square feet	1900	1950	2000	2050	2100	2150	2200	2250	2300
Sheets required	1615	1658	1700	1743	1785	1828	1870	1913	1955
No. of square feet	2350	2400	2450	2500	2550	2600	2650	2700	2750
Sheets required	1998	2040	2083	2125	2168	2210	2253	2295	2338
No. of square feet	2800	2850	2900	2950	3000	3050	3100	3150	3200
Sheets required	2380	2423	2465	2508	2550	2593	2635	2678	2720
No. of square feet	3250	3300	3350	3400	3450	3500	3550	3600	3650
Sheets required	2763	2805	2848	2890	2933	2975	3018	3060	3103
No. of square feet	3700	3750	3800	3850	3900	3950	4000		
Sheets required	3145	3188	3230	3273	3315	3358	3400		

A box of 112 sheets 14"x20" laid in this way will cover 165 sq. ft.

Sheets 14"x20" can be laid either the long or short way. The best rule to guide in laying the sheet the 14" way is similarly, in laying 28"x20", always lay the 20" way, i. e., the short dimension crosswise.

Standing-Seam Tin Roofing.—Table showing number of 28"x20" sheets required to cover a given number of square feet with standing seam roofing. The standing seams take 2¾" off the width and the flat cross-seams, edged ¾", take 1¼" off the length of the sheet. The covering capacity of each sheet is, therefore, 25¼"x18¾", or 473.8 square inches. In these tables fractional parts have been counted as a full sheet.

No. of square feet	100	150	200	250	300	350	400	450	500
Sheets required	43	65	88	110	132	154	176	198	220
No. of square feet	550	600	650	700	750	800	850	900	950
Sheets required	242	264	286	308	330	352	374	396	418
No. of square feet	1000	1050	1100	1150	1200	1250	1300	1350	1400
Sheets required	440	462	484	506	528	550	572	594	616
No. of square feet	1450	1500	1550	1600	1650	1700	1750	1800	1850
Sheets required	638	660	682	704	726	748	770	792	814
No. of square feet	1900	1950	2000	2050	2100	2150	2200	2250	2300
Sheets required	836	858	880	902	924	946	968	990	1012
No. of square feet	2350	2400	2450	2500	2550	2600	2650	2700	2750
Sheets required	1034	1056	1078	1100	1122	1144	1166	1188	1210
No. of square feet	2800	2850	2900	2950	3000	3050	3100	3150	3200
Sheets required	1232	1254	1276	1298	1320	1342	1364	1386	1408
No. of square feet	3250	3300	3350	3400	3450	3500	3550	3600	3650
Sheets required	1430	1452	1474	1496	1518	1540	1562	1584	1606
No. of square feet	3700	3750	3800	3850	3900	3950	4000		
Sheets required	1628	1650	1672	1694	1716	1738	1760		

A box of 112 sheets 28"x20" laid in this way will cover 381 sq. ft.

COST

Cost of Tin for Standing-Seam Roofing.—Size sheets 28"x20"

Price per box and per square foot

When tin costs per box [illegible]	[illegible]
[illegible]	[illegible]
When tin costs per box [illegible]	[illegible]
[illegible]	[illegible]
When tin costs per box [illegible]	[illegible]
[illegible]	[illegible]
When tin costs per box [illegible]	[illegible]
[illegible]	[illegible]

The above estimates are not exact, but [illegible]

Each sheet 14"x20", when edged or folded, measures 13"x19", or 247 square inches, but when laid on the roof, allowing 1" edge measurement, it covers only 12½"x18½", or 231.25 square inches. In the following all fractional parts of a sheet are counted a full sheet.

No. of square feet	100	150	200	250	300	350	400	450	500
Sheets required	81	121	163	203	244	284	326	366	407
No. of square feet	550	600	650	700	750	800	850	900	950
Sheets required	447	488	528	569	610	650	691	732	772
No. of square feet	1000	1050	1100	1150	1200	1250	1300	1350	1400
Sheets required	813	854	894	935	976	1016	1057	1098	1138
No. of square feet	1450	1500	1550	1600	1650	1700	1750	1800	1850
Sheets required	1179	1220	1260	1301	1342	1382	1423	1464	1504
No. of square feet	1900	1950	2000	2050	2100	2150	2200	2250	2300
Sheets required	1545	1586	1626	1667	1708	1748	1789	1830	1870
No. of square feet	2350	2400	2450	2500	2550	2600	2650	2700	2750
Sheets required	1911	1952	1992	2033	2074	2114	2155	2196	2236
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Sheets required	2643	2684	2724	2765	2806	2846	2887	2928	2968
No. of square feet	3700	3750	3800	3850	3900	3950	4000		
Sheets required	3009	3050	3090	3131	3172	3212	3253		

A box of 112 sheets 14"x20" laid in this way will cover 180 sq. ft.

TIN IN ROLLS

[illegible]

ROOFING TIN

Specification Reference Card

This reference card is offered for architects who wish to secure for their clients high class roofing plates that represent Equivalent Values

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